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JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION

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ORIGINAL PAPERS

Blood Volume Problems In Acutely Injured Patients

LEO J. SCANLON, JR., M.D.

Jackson, Mississippi

In dealing with acutely traumatized patients, it is essential that need be balanced against the hazards of blood transfusion therapy. The author evaluates the indications for blood plasma and plasma expanders and discusses the intrinsic risks of blood transfusion.

ACUTELY TRAUMATIZED PATIENTS experience blood volume changes that vary with the type of injury.

If the injury is one in which a crushing force has acted upon the body causing relatively little hemorrhage but extensive muscle contusion, plasma is the main blood component lost. The plasma is also the main blood component lost in severe thermal burns.

A different state exists when the injury has severed blood vessels and an external or internal loss of blood is taking place.

Besides blood loss, the circulatory physiology of the body can be disturbed by emotional and sensory stimuli such as fear, apprehension, and pain. Injuries to the brain, spinal cord, or lungs should be searched for in a patient with circulatory dysfunction following trauma.

The term "shock" has been given many meanings by various authors, but most commonly it describes a clinical picture associated with circulatory hypofunction. The degree of shock in traumatized patients generally is directly in proportion to the amount of blood volume. This parallelism between the clinical state and the blood volume is useful in guiding our therapy.

A normal adult male of 150 pounds has ten pints of blood circulating through his vascular system. In an adult there is approximately one pint (500 milliliters) of whole blood per 15 pounds of body weight.

It has been shown[1] that successful surgery can be undertaken once the blood volume of an injured patient has been restored to 80 per cent of normal.

Based on their World War II experiences with bomb victims, British surgeons[1] have defined three phases of blood volume reduction and their corresponding pictures.

The first or "Normovolemic" phase occurs when the patient's blood volume has been reduced, but not below 90 per cent of normal. The blood pressure is above 100 millimeters of mercury, and the pulse rate varies between 70 to 100 per minute, with the extremities being warm or normal to touch. No facial pallor is present.

The second phase is termed the "Pattern of Cold Tachycardia" and corresponds to a blood volume between 70 per cent to 80 per cent of

From the Department of Clinical Laboratory Sciences, The University of Mississippi School of Medicine.

Read before the Symposium on Trauma, American College of Surgeons, Jackson, May 10, 1960.

normal. The systolic blood pressure is still at or above 100 millimeters of mercury, but the pulse rate is greater than 100 per minute. The extremities are cold, and facial pallor is present.

The third phase is termed the "Pattern of Cold Hypotension" and indicates that the blood volume has fallen below 70 per cent of normal. The pulse rate is high, the extremities are cold, and marked facial pallor is present in addition to a systolic blood pressure below 100 millimeters of mercury. This pattern tends to remain until abolished by transfusion. As the blood volume approaches 60 per cent of normal, the pulse becomes impalpable, the cardiac rate is generally above 140 per minute with dyspnea and cold sweating making their appearance. The patient is now at a critical level and unless treated promptly will take the fatal plunge into irreversible shock. When the blood volume falls to about 50 per cent of normal, death occurs.[2]

IMBALANCE CORRECTION

Having arrived at the decision as to how much fluid has been lost from the vascular system, we proceed toward correcting this imbalance with the appropriate fluid. At our disposal are many agents such as whole blood, packed cells, plasma, dextran 6 per cent in saline, and solutions of human albumin.

The first step prior to any therapy is to draw a sample of venous blood for hematocrit and hemoglobin determinations and for sending to the blood bank for typing and crossmatching.

If the injury is associated with a high hematocrit and hemoglobin level, then we can assume that plasma loss is taking place and initiate therapy with plasma or dextran. Human albumin solutions, although excellent, are not readily available in many hospitals, and are quite expensive.

A pint of human plasma raises the blood volume by 5 per cent. Thus, for a 70 kilogram man whose blood volume has fallen to 60 per cent of normal, two pints of plasma will be required to bring the blood volume to 70 per cent and four pints for obtaining an 80 per cent blood volume.

Pooled human plasma formerly carried a one in 50 chance of containing the virus of infectious hepatitis. However, the newer technique of prolonged storage at room temperature is proving successful in eradicating this hazard of plasma. Plasma usage is increasing as the danger of hepatitis recedes.

Dextran as a 6 per cent solution in normal saline is an adequate plasma expander for use in instances when plasma loss is great, as in burns or crushing injuries. While dextran is beneficial in the emergency phase of shock occurring from hemorrhage, the resulting anemia should be corrected by whole blood. If dextran is started prior to drawing blood for typing and crossmatching, it is sometimes found difficult to crossmatch this blood because of the rouleaux formation often produced. Normally about 25 per cent to 50 per cent of the administered dextran is renally excreted within 24 to 48 hours.

PLASMA LOSS GUIDE

As a guide to plasma loss, the degree of hemoconcentration is helpful. A hemoglobin rise to 150 per cent of normal is usually associated with the loss of at least 1,600 milliliters of plasma in a normal sized man.[3]

There is but one definitive therapy for an injured person losing blood: whole blood transfusion. The question often arises as to how fast to give whole blood to injured patients. A good rule of thumb is that the dangers of giving whole blood too slowly are greater than giving it too rapidly. In a traumatized patient needing blood, it is recommended that one to two pints (units) be given within a 30 to 40 minute period.

Unfortunately, laboratory methods, short of total blood volume studies, are of little help in hemorrhage of short duration. Several hours must elapse before the venous hematocrit reflects the quantity of blood lost.

The rate of restoration of blood volume after hemorrhage was studied by Ebert, Stead, and Gibson, who found that after the loss of about 1,000 milliliters of blood, adults require some 36 hours to restore blood volume.[4]

CHANCES FOR ERROR

Patients traumatized by wounds or injuries rarely suffer severe pain as they pass into shock-like states, and become less sensitive to noxious stimuli of all types. During the rush and confusion which often accompany the arrival of acutely injured patients, the chance of an error in giving blood to the wrong patient or of drawing or mislabeling the blood sample is highest. Since the injured patient often is unable to report the phenomenon that accompany an incompatible transfusion, the injury would be compounded. For this reason, most pathologists require a Coombs crossmatch on blood for comatose or semicomatose injured patients, as the Coombs crossmatch is the safest and best of all the techniques of crossmatching.

Before closing this discussion on fluid therapy for injured patients, a few pertinent facts concern-

ing the intrinsic hazards of blood transfusion should be stated. It is now a generally accepted fact that the giving of a single pint of blood carries a mortality rate higher than an appendectomy or the giving of ether as an anesthesia. There is a probability of one death due to transfusion per 2,000 transfusions.[5] Other statistics show that infectious hepatitis occurs in a ratio of one per 200 transfusions, despite the most meticulous care being taken to select donors. At the University Hospital we take a long and involved history from each prospective donor, plus a brief physical examination and a test on each blood for serology, anemia. and hyperbilirubinemia. These facts should be kept in mind when ordering blood for patients. ★★★

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TRAMPOLINE TROUBLES

Noting the alarming number of injuries and deaths among amateur bouncers, community health departments are becoming concerned about the trampoline fad. Many communities are now drawing up stricter rules for the use and supervision of the mats. Recently, the American Medical Association took an official stand on the "hazards" of the sport and issued a report urging revised controls for commercial use of the trampolines.

According to the report: When maneuvers on the mat are performed imperfectly or incompletely, they lead to disaster. The back somersault is named as the most dangerous and most frequent cause of severe injury. (Although both front and back somersaults are cited as dangerous, the back somersault is blamed for the highest number of acute injuries to jumpers' spinal columns.)

Warns the AMA:

• Extended periods on the mat are not advisable. For the beginner, a half hour at a time is maximum.

• Most dangerous place on the mat is the center. Reason: While critical injury may result from striking the springs or side supports, gravest neurological accidents occur when bouncers land awkwardly in the middle.

• The presence of qualified gymnastics instructors and strict enforcement of them of graduated training programs should be enforced at all times. In particular, children should have special supervision because they don't appreciate the risks involved.

The Insider's Newsletter

Treatment of Burns In Limited Medical Facilities

JOHN G. EGGER, M.D., and VIRGINIA S. TOLBERT, M.D.

Drew, Mississippi
Ruleville, Mississippi

When Lucy Mae Fletcher was first admitted to the North Sunflower County Hospital, she was given very little chance of living. Seventy-five per cent of the 6-year-old Negro girl's body had received second and third degree burns when her dress caught fire from a gas heater. Through skill and what the authors term "tender loving care," Lucy Mae is not only alive today but able to walk and attend school. This is her story.

A NEWSPAPER CLIPPING in 1956 read:

"Ruleville, Mississippi (AP)—A 6-year-old Negro girl probably owes her life to the skill and generosity of the staff of the North Sunflower County Hospital. Lucy Mae Fletcher suffered third degree burns over 75 per cent of her body last December when her dress caught fire from a gas heater. The hospital lacked the necessary skin-grafting equipment, but it went out and bought it. Three white staff doctors donated their time and skilled hands. The cost of the treatment, to date, the hospital says has been more than $2,000, exclusive of the fees the doctors waived. Completion of the grafting process will take another four months at a cost of another $2,000. Lucy Mae's father, J. H. Fletcher, said he is 'thankful to be living among people who will do so much when it needs to be done.' "

Lucy Mae, 6-year-old Negro female was admitted in a critical condition to North Sunflower County Hospital in Ruleville about 9:45 p.m., Dec. 19, 1955, with a history of having been burned several hours before when her clothes caught fire from an open gas heater. Approximately 75 per cent of her body received second and third degree burns involving both arms, forearms and hands, the lower anterior and posterior thorax just below the nipple line, the buttocks, hips, perineum, and both lower extremities except for the ankles and the plantar surface of both feet. The burns of the arms and forearms were chiefly first and second degree.

Lucy Mae received emergency debridement and dressings with vaseline gauze and was placed in bed, in shock, expected to die. She received the following orders: diet as tolerated; Elixir Phenobarbital, 2 drams, if needed, every four hours; aspirin, 5 grains as required; Achromycin, 125 mg. every four hours; Foley catheter drainage; 24 hour fluid intake and output plus sterile bed sheets and heat cradle. Her urinary output was 100 cc. the following morning so fluids via clysis were begun since all veins were collapsed.

Her temperature was subnormal the first four days of hospitalization, taken rectally. Then it began spiking 104 degrees. This temperature averaged about 102 degrees for the 11 week period, spiking from 104 to 105 degrees. She took inadequate oral fluids, and was given 1,000 cc. 5 per cent glucose in Ringers solution daily by clysis for the next 10 days. On the 10th day a vein was cannulized in an ankle, and she received 500 cc. whole blood plus a continuous slow drip of glucose. This was kicked out by the patient four days later while being turned in bed. Her course continued septic with temperature elevations, rigors, and numerous complications for the next four months.

On Jan. 17, 1956, the entire plantar surface of her right foot was severely burned when her mother removed the cover from a hot water bottle and placed it directly on her skin. This healed in approximately four weeks.

On Jan. 23, 1956, approximately one month after admission to the North Sunflower County

Read before the 74th Semi-Annual Meeting, Delta Medical Society, Belzoni, October 12, 1960.

Hospital, the hospital purchased a Padgett-Hood Dermatone. Lucy then received the first of some 14 separate skin grafts. Bronchial pneumonia promptly followed her general anesthetic, but she responded to therapy.

SINGLE ANSWER: SKIN

The problem at this time was keeping the patient free as possible from infection, and keeping adequate fluid balance due to the extensively burned area completely denuded of skin. After much forethought, discussion, and studying of all burn literature available, the single answer to Lucy's problem was skin. Lucy Mae's father happened to have the same type blood, so he was picked as a skin donor and admitted to the hospital. On Feb. 8, 1956, under a spinal anesthesia five split thickness skin grafts, approximately 4 x 8 inches, were taken from the abdomen and thighs of the father and transferred to the raw areas of Lucy's abdomen and thighs. At the same time, a small split thickness graft was taken from Lucy's chest and split into many small implants. This resulted in almost complete coverage of the burned areas, and remained viable almost 100 per cent for the following six weeks. This homograft from the patient's father provided a life-saving cover, and over 50 per cent permanently remained viable with an excellent "take."

GRAFTING TECHNIC

The technique of donor skin preparation consisted only of judicious scrubbing with Septisol and cleansing with ether. After taking the skin desired, the site selected for implantation was irrigated freely with sterile normal saline, gently scrubbed with gauze, and the implant laid on the area selected. Sterile strips of nylon cloth, saturated in normal saline were then laid over the graft, followed by a layer of sterile strips of Furacin saturated gauze. Pressure bandages covered by Ace bandages completed the dressing. Large skin grafts were incised longitudinally approximately every few inches to allow escape of serum. Dressings were removed about the fifth day postoperatively and open therapy with heat cradle instituted.

During each grafting operation, small pinpoint "pinch" autografts were taken from the patient's chest and scattered over any available raw area. General anesthesia was necessary each time, and practically every operation was followed by a period of respiratory infection or bronchial pneumonia. Lucy also had frequent episodes of tonsillitis and sore throat. The most serious complications encountered were ulcerations over each femoral trochanter exposing the bone, but fortunately no joint complications were resultant. Large abscesses over both deltoid regions of the shoulder resulted from penicillin injections, but these healed without complications.

Due to stool contamination, no attempt was made to epithelize the perineum. It was with a great deal of surprise that after the third month of hospitalization the vaginal and rectal epithelia were found slowly extending in ever widening circles, with no evidence of infection, to eventually cover the perineum in its entirety by the eighth month.

HOSPITAL COURSE

On April 20, 1956, approximately four months after admission, Lucy was able to be lifted into a wheel chair and did not want to get back into bed. On July 7, 1956, she was able to walk with assistance and with crutches and was able to crawl to the foot of her bed.

The following Christmas Eve, Dec. 24, 1956, she was allowed a 12 hour visit to her home with her family.

On Jan. 24, 1957, after approximately 13 months of hospitalization, Lucy was sufficiently recovered to be discharged, ambulatory. She had severe burn contracture of her left hip and knee, but the surprising fact was that she was alive and able to walk at all.

During her hospitalization, she received numerous antibiotics, multiple dressings with Furacin powder and Furacin dressings, vaseline gauze, Foille, saline soaks and irrigations, open heat cradle therapy, hematonics, vitamins, plus numerous other drugs and a total of 22 whole blood transfusions.

'TLC': AN IMPORTANT FACTOR

One of the most important factors with regard to Lucy's recovery was the "tender loving care" (actually private duty nursing) that the nursing staff of North Sunflower County Hospital provided.

Lucy was referred to the Crippled Children's Service on May, 1957, and has been under their care since that time. When she was first seen in their clinic, she was reported to have a 45 degree flexion contracture of the right hip, some contracture of the right knee, and an equinus deformity of the right foot. There were severe adduction contractures of both hips due to burn scars around the genital region.

On Feb. 3, 1958, Lucy was treated at LeBonheur Hospital in Memphis with excision of the burn scar contracture of the right groin and ap-

plication of a large, thick, split thickness skin graft. There was good result from this procedure. It was reported at that time that due to the contracture she had a chronic dislocation of the right hip.

On March 25, 1958, the same excision and grafting procedure was performed on the left groin with good results.

On Dec. 16, 1958, surgery was performed on the right hip with osteotomy and plate put in place.

On Feb. 4, 1959, further surgery was performed with tendo achillis lengthening; posterior capsulotomy; anterior transfer of the right posterior tibial tendon. This procedure was quite successful with only slight skin slough in the region of the Achilles tendon. She was put into a double upright short leg brace.

On May 30, 1959, Lucy was seen in the clinic for a check-up with range of motion from 80 to 90 degrees in the right ankle. She was ambulated on crutches without weight bearing on the lower extremity. Her progress was considered satisfactory.

On Sept. 21, 1959, Lucy was again seen in the clinic for follow-up evaluation. It was felt that she had a serviceable range of motion of the right hip. The right ankle could be brought to 90 degrees. Her gait was much improved. At that time they stated she had a pelvic support osteotomy and transfer of post tibial tendon. An elevation was placed on the right shoe.

Check-up x-rays on Dec. 21, 1959, showed osteotomy site with solid bony union. There was a 4½ cm. shortening of the right lower extremity. She was given an elevation on the right shoe, a brace, and was told to try walking with only one crutch.

Check-up March 21, 1960, showed Lucy to be in good condition except that leg length discrepancy was at that time 7 cm.

April 27, 1960, the progressive increase of leg length discrepancy was discussed with Lucy's mother, who preferred to have surgical treatment of the child for this condition. She was, therefore, scheduled for hospitalization in July at which time it was planned to perform lower femoral and upper tibial and fibular epiphysiodesis. This surgery was performed Aug. 2, 1960, with an uneventful postoperative course. She was put in a posterior plaster splint.

Clinic check-up on Sept. 19, 1960, disclosed good results from surgical procedures. She was to be allowed full weight bearing with crutches proceeding to full weight bearing. She requires a strap attachment to her brace with a lift on her right shoe. A report from her relatives stated that Lucy is attending school, getting along well and thoroughly enjoying living. ★★★

169 South Main Street (Dr. Egger)

SIMPLY SEMI

Semi-private? Semi-demi!
Nomenclature misbegot!
How can privacy be semi?
Private's private or it's not.

Soon we'll have for countless millions
Other semi-private pearls:
Semi-lying-in pavilions
Serving semi-pregnant girls!

—Corinna Marsh

(Reprinted from *Good Housekeeping* magazine. © 1960, by The Hearst Corporation, all rights reserved.)

Case Report IV of Maternal Mortality Study: Hemorrhage Due to Abruptio Placentae

WILLIAM E. NOBLIN, JR., M.D.
Jackson, Mississippi

Case No. 179-11650-59 entered the hospital emergency ward at about 36 weeks of pregnancy complaining of abdominal pain and vaginal bleeding. Labor began spontaneously and after five hours resulted in the birth of a live infant. Vaginal bleeding continued despite the administration of oxytocics and packing of the uterus on three separate occasions. Eight hours later the patient died. The findings of the Committee on Maternal and Child Care are discussed in this report.

THE FOLLOWING CASE REPORT, presented by the Committee on Maternal and Child Care, represents death from hemorrhage due to abruptio placentae.

CASE NO. 179-11650-59

W. A. C., a 35-year-old Negro female, para 14, was first seen in the hospital emergency ward. Her expected date of confinement was uncertain, but estimates suggested that she was at about 36 weeks of pregnancy. She had been seen previously on two occasions in the County Health Department Prenatal Clinic during her eighth month of pregnancy (information obtained later). Hypertension (blood pressure 200/110) was noted and the patient was advised and urged on both occasions to see a private physician for treatment. History obtained in the clinic revealed that she had had high blood pressure during her last two pregnancies with "kidney trouble." She had a positive serology 10 years previously and had received adequate treatment at a public health center for late latent syphilis.

At the time she was seen she complained of abdominal pain and vaginal bleeding. Her blood pressure was 200/110 and edema of the face and hands (1+) and of the feet (3+) were noted. There was no albuminuria. Her hemoglobin was 70 per cent.

Following admission the patient apparently went into labor independently with spontaneous rupture of the membranes. Labor lasted five hours during which vaginal bleeding continued. A spontaneous vaginal delivery occurred from an occiput anterior position of a premature infant weighing 4 pounds, 12 ounces. No lacerations were noted. The patient received Raudixin (100 mg.) and Demerol and Sparine (50 mg. each) during labor. Following delivery, vaginal bleeding continued until the patient's death eight hours later. During this time the uterus was packed on three occasions and the patient received 10 pints of blood and various vasopressors. The cause of death was stated to be premature separation of the placenta.

CASE REVIEW

This case was reviewed by the Committee on Maternal and Child Care at its regular quarterly meeting and the following evaluations made:

I. Adequacy of data. The data obtained in the case were rated 2 on a scale of 1 (minimal) to 5 (completed data sheet, relevant explanatory note, and autopsy report).

II. Cause of Death. This case was considered to be a direct obstetrical death due to hemorrhage from abruptio placentae. Because of the sketchiness of the record, there was some doubt as to the actual cause of death.

III. Avoidability. In ascertaining avoidability, the committee, following the AMA Guide for Maternal Death Studies, assumes (1) that the physician possessed all the knowledge currently available and relevant to the factors involved in the death, (2) that he had a high level of technical ability by experience, and (3) that he had available to him all the facilities present in a well-organized and properly equipped hospital.

Preventive medicine member, Committee on Maternal and Child Care.

It is realized that these are extremely strict criteria and that a majority of maternal deaths occur under far less desirable circumstances. However, if maternal care is to be improved, high standards must be maintained, Therefore, on this basis the committee felt that this death was avoidable.

IV. Factors of Avoidability. If a death is considered avoidable, the committee attempts to assign factors of avoidability to the physician, hospital, patient or a combination of these. In this case, the committee felt that avoidability should be assigned in all three areas. The patient neglected to follow the advice given her by the Public Health Prenatal Clinic. There was a real question, from the record, as to whether adequate facilities were available in the hospital for dealing with this type of obstetrical emergency. Finally, professional judgment was involved as regards the management of bleeding at the end of pregnancy and of serious postpartal hemorrhage.

DISCUSSION

Although the committee assigned the cause of death to abruptio placentae, this diagnosis was presumptive. More adequate clinical information and particularly the performance of an autopsy might have been of considerable help in this respect. There might have been other causes for the postpartal bleeding such as uterine atony, genital tract lacerations, retained secundines, or even a blood dyscrasia.

This patient's problem undoubtedly started long before she became pregnant for the last time. A grand multipara, she had developed hypertension in her previous two pregnancies. This should have alerted both her and her medical attendants to the dangers inherent in her becoming pregnant once more. Methods of preventing such a pregnancy should have been suggested to the patient and should have been carried out. During her present pregnancy she should have received care early and regularly. When she did finally report to the Public Health Clinic, she was advised that she needed medical treatment and refused this advice.

When a patient such as this presents herself at the hospital, definite steps must be taken to establish a diagnosis. Bleeding in the last trimester of pregnancy is a serious matter. The patient should be typed and cross-matched for at least 1000 cc. of blood. When this is available, if she is at or near term, she should be taken to the operating room. With everything in readiness to perform a cesarean section if necessary, a careful vaginal examination is performed. In addition, since one of the serious complications of abruptio placentae is hypofibrinogenemia, a tube of blood should be drawn for a clot observation test and this should be repeated at regular intervals.

If the diagnosis of abruptio placentae is established, then rapid delivery is desirable. This patient apparently did have a fairly rapid and spontaneous labor and delivery of a living child. The fetal mortality in abruptio placentae is very high so that in this respect the case had a satisfactory outcome.

Following delivery, the patient began to bleed. Oxytocics were apparently given but the type and amount were not stated. If oxytocics fail, then it is mandatory that the patient be taken back to the delivery room and examined under aseptic precautions to exclude the presence of a laceration or retained placental fragments. If none of these are found and the uterus still fails to contract in response to intravenous oxytocics, on certain occasions it is useful to pack the uterus. With continued bleeding, it is extremely important to be sure that the patient does not have a blood dyscrasia and repeated clot observation tests and a coagulogram should be performed at this time. In this connection, a hospital in which obstetrical cases are handled should have a supply of fibrinogen which is immediately available or which can be obtained within a short period of time. Although we have no evidence in this case that there was a deficiency of fibrinogen, this might well have occurred. If the uterus has been packed once and bleeding occurs through the packing, there is no point in packing it again. The only thing that will save the patient at this point is massive transfusions and hysterectomy. Since this particular patient did not die until eight hours after delivery, it would appear that there was sufficient time to have performed a hysterectomy.

SUMMARY

A maternal death is described in which postpartal hemorrhage following abruptio placentae appeared to be the major cause of death.

Patients who have vaginal bleeding at or near term should be examined under aseptic precautions in the operating room with preparations made for cesarean section and with compatible blood available. A clot observation test is an essential accompaniment of such preparations.

Postpartal bleeding which does not respond immediately to oxytocics makes a careful re-examination of the genital tract under aseptic precautions mandatory.

On rare occasions intrauterine packing may be useful in controlling postpartal hemorrhage but should not be repeated. Failure of a pack to arrest bleeding is an indication for massive transfusion and emergency hysterectomy. ★★★

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Clinicopathological Conference XII

Conducted by the Department of Pathology
Mississippi Baptist Hospital
Jackson, Mississippi

CPC XII marks Journal MSMA's second year of presenting case discussions from Mississippi hospitals. During the past year, case records from the Mississippi Baptist Hospital, the University of Mississippi Teaching Hospital, and the Veterans Administration Center have been reported.

The subject of January's CPC is a 61-year-old white man who was admitted to the Baptist Hospital with complaints of progressively increasing numbness and paresthesias. The initial symptom was a burning sensation involving the distal one-third of the feet, particularly the soles, and both hands, especially the fingers. Later, his lips and the tip of his tongue were also affected. Two months after the original admission, the patient went into a coma and died. The clinical discussion is by Dr. Lucien R. Hodges. Dr. Louis Schiesari prepared the autopsy report.

A 61-YEAR-OLD white man was admitted to the Baptist Hospital on June 29, 1960, with the chief complaints of progressive weakness and numbness. He gave a history of progressively increasing numbness and paresthesias with burning sensation involving the distal one third of the feet, particularly the soles, and both hands, especially the fingers. These symptoms began about four months prior to admission. The onset initially involved only the tips of the fingers of the left hand. However, one month later similar involvement became apparent in the right hand and one month prior to admission the lips and the tip of tongue became involved. He described this sensation, especially in the fingers, as feeling like he was "holding sand." There had also been associated weakness of both hands and marked difficulty in maintaining his equilibrium.

He stated that unless he held on to objects he felt that he would actually fall forward or to either side. The latter equilibrium disturbance had been more prominent for the past week. He was of the opinion that he could not tell where his hands or feet were. The derangement in the tip of his tongue was accompanied by absence of taste in this area. When he swallowed food, he could taste the food only posteriorly with respect to the tongue's surface. About two weeks before, he was first found to have an elevated blood pressure at which time he was treated with Diupress. After taking three doses, he noticed severe abdominal cramping and temporarily discontinued the preparation. He was later able to take two or three doses without difficulty.

Past history revealed that about three years before he had had some type of fungus infection of the finger nails involving the fingers of the left hand and also had a similar patch on the right side. He stated that 15 years earlier he had had "ulcerated stomach." In 1917 he had had an infection of the penis which necessitated circumcision. For the past 15 years he had been aware of "choking when eating dry foods such as bread crumbs or chicken." Otherwise, system review and past history were not contributory. The examination revealed a well-developed, well-nourished white male of about the stated age with obvious difficulty with respect to muscle power as noted by his moving about clumsily in bed and with some flexure deformity involving little and ring fingers of the left hand. The blood pressure was 140-150 over 90-100 (right arm) and 200/110 (left arm). All peripheral pulses were palpable and pulsatile. The heart was not enlarged to palpation or percussion and the rhythm was regular.

A grade II holosystolic murmur was present over the aortic area with transmission into the right side of the neck and along the left sternal

border to a lesser degree. The second aortic sound was accentuated. There were no signs of congestive heart failure. The electrocardiogram showed myocardial damage most probably secondary to hypertension. There was no evidence of myocardial infarction. The neurological examination revealed definite and marked weakness in the grips of both hands, a markedly positive Romberg's sign, and absence of all deep tendon reflexes. There was an exaggerated burning pain sensation on pressure over the soles of the feet, and the tips of the fingers and the finger to nose touching was impaired.

LABORATORY DATA

The hemogram revealed a hemoglobin of 17.3 grams per cent, a hematocrit of 51 volume per cent and a total white blood count of 17,450 with 61 neutrophils, 6 eosinophils, 28 lymphocytes, and 5 monocytes. The urinalysis was negative. The admission biochemistry data were as follows: calcium—9.4 milligrams; CO_2 combining power—63.6 volume per cent; chlorides—101 mEq per liter; glucose—78 milligrams per cent; potassium—3.3 mEq per liter; sodium—138 mEq per liter; creatine—1.3 milligrams per cent; urea nitrogen—33 milligrams per cent. The VDRL was negative. The spinal fluid showed a total protein of 105 milligrams per cent, with 3 lymphocytes, a gold curve of 1112221000, and a negative serology. X-ray studies of chest, small and large intestine, and gallbladder were negative. An excretory urogram showed good urinary function. A myelographic study was unsatisfactory. There was noted moderate hypertrophic arthritis of lower cervical area.

READMISSION EXAMINATION

He was discharged and readmitted on Aug. 9, 1960, at which time the total protein of spinal fluid was 350 milligrams per cent with 187 white blood cells per cubic millimeter with 23 per cent polymorphonuclear leukocytes and 77 lymphocytes. A myelogram done this time showed the space to be patent with escape of the dye into the cranial cavity. In the interval there was noted a progressive deterioration of the previously noted signs and symptoms without appearance of new manifestations. His last admission was on Aug. 24, 1960, at which time he was in marked respiratory distress, breathing being maintained only with difficulty by poor employment of the accessory muscles of respiration. He was placed in a respirator but steady and rapid deterioration ensued into coma and death on Aug. 27, 1960.

CLINICAL DISCUSSION

Dr. Lucien R. Hodges: "This case concerns a 61-year-old white man with the chief complaints of progressive numbness and weakness, who expired approximately two months from the time of his first admission. His initial complaints were of progressively increasing numbness and paresthesias with a burning sensation involving the distal one-third of the feet (soles), both hands and fingers, these symptoms having begun about four months prior to admission. He also had sensory involvement of the tip of the tongue and described the sensation in the fingers as feeling as if he were holding sand. He had some equilibrium disturbances in that it was difficult to maintain his balance, falling forward or to either side unless he held to an object. These difficulties had been more prominent within the past weeks. He could not tell where his hands or feet were situated. I think the next most important statement is that when he swallowed food he could not taste it on the anterior aspect of his tongue. About two weeks previously he was first found to have an elevated blood pressure.

DIAGNOSTIC POSSIBILITIES

"In noting the history of this patient, the first thing that is suggestive is some kind of neuritis with paresthesias and numbness of his hand. Going a little further, it suggests either an involvement of the posterior columns, cerebellum, or the spinal ganglia in that he had difficulty with equilibrium. Further, the derangement of sensation of taste and some numbness around the lips suggest cranial nerve involvement. The fifth cranial nerve would affect the numbness around his lip and the chorda tympani, a branch of the seventh nerve, would involve the taste of the tip of his tongue. It is not stated whether the tip of the tongue was anesthetic or hypesthetic, either one.

"The next thing that we note is that he was found to have an elevated blood pressure and, according to protocol, this was not present before this illness began, or either he had not been to a doctor. I believe that we are dealing with something that, first, involves the peripheral nerves and, second, may either be involving the spinal ganglia, posterior columns, or cerebellum, and thirdly, something involving the sensory nucleus of the fifth nerve and the ganglia of the seventh nerve, and also brainstem involvement. I would say brainstem involvement because he did not

have any evidence of an elevated blood pressure before the present illness began. So, as far as the history is concerned, the present illness includes peripheral neuritis, possible involvement of the spinal cord and brain stem in the lower portion at and below the pons.

PAST HISTORY

"His past history reveals that approximately three years ago he had had some type of fungus infection of the finger nails on the left hand and also some on the right hand. What happened to this is unknown. Otherwise he had had an ulcerated stomach and in 1917 an infection of the penis which required circumcision. This brings out the possibility that this might be some type of neurovascular syphilis. The next statement is that he had been aware of a choking sensation when eating dry foods, such as bread crumbs or chicken, and this had been present for 15 years. I would think for that to be of any significance, more symptoms should have followed within the 15 year interval and, therefore, will disregard it.

"The examination revealed a well-developed white male, appearing of the stated age, with some obvious difficulty in respect to muscle power, as noted by his moving about clumsily in bed, with some flexure deformity. The fact that he moved about clumsily does not mean that he had weakness in his extremities, but, upon examining further the protocol, I believe it indicates that he did have weakness in the grip of both hands. The flexure deformities involving the little and ring fingers of the left hand probably are the result of some previous injury.

CARDIOVASCULAR SYSTEM

"The blood pressure was 140-150/90-100 in the right arm and 200/110 in the left arm. I will reserve any comment on this finding. All of his peripheral pulses were palpable and pulsatile. The heart was not enlarged and he had a grade II holosystolic murmur over the aortic area with transmission into the neck. I believe this would most likely signify that he had some aortic stenosis, and with his hypertension, I would think that this is on the basis of arteriosclerosis. There were no signs of congestive heart failure. The only 'hooker' in this situation is that he does not have any cardiac enlargement. The electrocardiogram showed myocardial damage, most probably secondary to hypertension. Apparently, all these findings are new changes in this man. Either we can discount his story about the hypertension or consider it to be something to be involved in his present illness.

"The neurological examination revealed a definite and marked weakness in both hands. Here we must consider whether or not this might be an amyotrophic lateral sclerosis or involvement of the anterior lateral horn cells. The protocol does not mention whether or not he had any fasciculations or atrophy. Another entity that I think we must include is a progressive muscular atrophy. Ordinarily with amyotrophic lateral sclerosis the deep tendon reflexes may be hyperactive in the beginning of the disease, and then later become hypoactive or absent. On the basis that there is no mention of there being any muscular atrophy, no fibrillations or fasciculations in the skeletal muscles, we may almost exclude this entity. Another factor that might exclude amyotrophic lateral sclerosis or progressive spinal atrophy is the fact that he had sensory involvement. It is almost unknown to have a sensory involvement along with a purely motor disease.

POSITIVE ROMBERG'S SIGN

"The next thing that comes up is the markedly positive Romberg and the finger-nose test being impaired. This can be impaired on the basis of two things: a spinal cord disease or a cerebellar disease. Without going into the laboratory work on this patient, the only thing that keeps me from placing this disease in the high cervical region or in the cervical region itself, is the fact that he had involvement of taste and the fifth nerve. There is no involvement of the seventh nerve, except for the nerve of taste, which comes from the nucleus solitarius, there being no involvement of the muscles of the face. Here again we are plagued with whether or not this is peripheral in the geniculate ganglion for taste, the gasserian ganglion for sensation, or in the high spinal cord itself, or in the pons, in the tracts, to give him these difficulties.

SPINAL CORD LESION

"If these could be excluded. I believe it could be placed on the basis of some spinal cord lesion, such as a tumor, either metastatic or one arising around the foramen magnum. This lesion was then some type of peripheral involvement, either involving the peripheral nerves themselves, the spinal ganglia and/or the spinal cord. With decreased reflexes one would almost have to consider involvement of the peripheral motor system or anterior horn cells, with practically complete destruction. Even with poliomyelitis there is practically never complete destruction of all the anterior horn cells, so that the patient will have some reflex left and also some motor power left. Here,

this patient has motor power in all extremities distally, but his grip is weak.

REVIEW OF LAB WORK

"The hemogram revealed a hemoglobin of 17.3 grams per cent and a hematocrit of 51 volume per cent. In polycythemia vera it is ordinarily a little higher than this, around 20 grams, with a hematocrit of 55 to 60 volume per cent. Here one must think of some type of vascular shunt, as far as the nervous system is concerned, or perhaps some type of vascular cerebellar tumor or an arteriovenous malformation about the cerebellum. The white blood count was 17,450, which I am at a loss to explain because there is no history of a systemic infection or systemic illness, other than his neurological involvement. This is rather high for a peripheral neuritis. The differential was essentially normal except for the presence of the eosinophils, and here I think one must think of some of the lower organisms that would cause this, or either this is a laboratory error—and the laboratory does not make errors. The laboratory reported that his chemistries were negative except for the urea nitrogen, which was 33 milligrams per cent. Here we have to think of some genitourinary tract involvement, perhaps from his hypertension.

VDRL: NEGATIVE

"The VDRL was negative. I would much rather see a Wassermann than a VDRL on this patient, but since this test was not done I will assume the VDRL to rule out syphilitic involvement. The most important finding was the spinal fluid protein, which was 105 milligrams per cent, with a cell count of 3 lymphocytes. The colloidal gold curve was negative and the serology on the spinal fluid was negative. With the total spinal fluid protein of 105 milligrams per cent we always have to consider some type of lesion, either causing a block or one producing an excessive amount of spinal fluid protein. The most likely one that would cause this is the Guillain-Barré syndrome, especially with the reduction of cells. In Guillain-Barré, or, if you like, Landry's ascending paralysis, there is dissociation of spinal fluid protein and cells; that is, the protein is high and the cell count is low. X-ray studies of the chest, small and large bowels, and gallbladder were negative.

"A myelogram was done, which was unsatisfactory. The myelogram could have been unsatisfactory for several reasons. The foremost reason could be that the arachnoid space was collapsed from the previous lumbar puncture. The other reason is that occasionally we see tumors involving the cauda equina which would prevent getting contrast media into the spinal canal. It is noted that he had hypertrophic arthritis of the lower spine, but very rarely do we find sensory involvement such as this man has demonstrated with this disorder. One may see muscular atrophy, some fasciculations and disturbance of gait, but these changes are over a long period of time and very slowly progressive, and are usually associated with cervical hypertrophic arthritis. Occasionally these signs due to hypertrophic arthritis have been called amyotrophic lateral sclerosis, but in the course of the latter the patient is usually dead within three years, with exceptions of course. I do not believe it varies more than one or two years. Another thing one would expect is the presence of considerable fasciculations in his muscles and considerable atrophy from anterior horn cell degeneration.

DISCHARGE WITHOUT DIAGNOSIS

"Following the myelogram, apparently no diagnosis was made, and he was discharged from the hospital. He was readmitted on Aug. 9, at which time the total spinal fluid protein was 350 milligrams per cent with 187 white blood cells per cubic millimeter, 77 per cent of which were lymphocytes. The fact that his spinal fluid protein had increased from 105 milligram per cent to 350 milligram per cent is highly suggestive of Guillain-Barré's disease, where there is a protein cell count dissociation with the spinal fluid protein often being normal in the beginning and subsequently developing high levels. The only 'hooker' in this is the cell count.

GUILLAIN-BARRÉ'S DISEASE

"In reviewing some of the literature on Guillain-Barré's disease, it is found that most often the cell count is normal or is less than five, although it can be 100 or more cells. I think it depends more on when the spinal tap is done. If I am asked when is the optimal time to do the spinal tap, the answer is, I do not know. Other things that should be considered are some types of neurological diseases that would cause an increased lymphocytic cell count and among these we encounter some forms of encephalitis or viral myelitis. Again, a myelogram was attempted without success and in the interval there was some progressive deterioration of all his signs, without any appearance of other manifestations.

"His last admission was an Aug. 24, at which time he was in marked respiratory distress. This gives us two clues: one that he has had severe involvement of all the intercostal musculature innervation from the spinal cord, or that he has had some bulbar disease. His respiration was maintained only with extreme difficulty, with poor employment of the accessory muscles of respiration, which would make one think of cervical or thoracic cord involvement affecting the muscles of the diaphragm and rib cage. He was then placed in the respirator and had steady, rapid deterioration and died in coma on Aug. 27. The total time period of the disease is two months, from the time of admission, with the history going back four months.

POSSIBLE CAUSES

"To make a diagnosis on this patient, I think we have to boil it down to whether this is a degenerative infectious, neoplastic, or toxic disease, and I think we can rule out the latter. I saw this man and there was no history of a toxic process to be elicited. I think we would have to include syphilis because of the lesion that was resected in 1917. Also, Landry's or Guillain-Barré type syndrome must be included because of the fact that it usually follows some type of systemic illness, such as infectious mononucleosis or some other tangent illness for which the patient perhaps did not seek medical attention and certainly was not hospitalized. We have no history of such a situation, but it must be considered that Guillain-Barré's disease can cause the above findings.

OTHER CONSIDERATIONS

"There are several other things I think we should consider, such as periarteritis nodosa and lupus erythematosum. Ordinarily with these diseases there is more encephalopathy than this patient has had, which would have to arise from involvement of the vessels about the brain stem and cervical cord, where I believe most of this man's difficulty was located, although he did have some peripheral nerve involvement. I think we can exclude a toxic process, a syphilitic etiology, or other infectious process on that basis. We have to involve the cerebellum in that the patient has had impairment of finger-nose testing and positive Romberg tests. We can also exclude the cerebellum on the basis that this is purely a spinal involvement and does not involve the cerebellum at all.

"Despite the fact that he could not tell where his feet were located, he still might be able to perform the finger-nose test quite well, as long as he could see his hand or the Romberg may not be positive with his eyes open. It does not indicate whether the eyes were opened or closed in the protocol, but he has no other cerebellar symptoms. Again, I saw this man and I felt strongly that this was a spinal ataxia, the other cerebellar functions being completely intact. The only things that I cannot explain are the elevated white count along with some type of peripheral neuritis, the involvement of taste, and the sensation of numbness around his lips. Sensations of taste involve the geniculate ganglion, which could be affected in this polyneuritic disease. The fifth nerve involvement could have been involved on the same basis, but still could have been involved on the basis of bulbar symptoms. Later on, during his second admission, myelograms were done which were successful enough to show the dye within the cranial cavity, without any sign of a block. I think this alone fairly well rules out a spinal cord tumor, though not absolutely.

DEGENERATIVE DISEASES

"The one category I have not mentioned is the degenerative diseases, and I think we can exclude these on the basis of: (1) there was no motor involvement other than his subjective and objective weakness, and (2) there were no atrophy or muscular fasciculations. This, I believe, would exclude amyotrophic lateral sclerosis or a progressive spinal atrophy. A syphilitic process, I think, can be excluded on the basis of his spinal fluid studies, although these are not positive in about 30 to 40 per cent of the cases, and again there is a long time lapse since 1917, with no symptoms during this time, and ordinarily the symptoms do occur earlier than 60 years of age. He has no evidence of a general paresis which one would expect with syphilis over this length of time.

"My diagnosis is that this is Guillain-Barré's disease on the basis of a progressive illness, an increase in spinal fluid protein, regardless of the cell count, and the fact that he had bulbar involvement along with peripheral nerve and perhaps spinal ganglia and/or spinal cord involvement."

AUTOPSY REPORT

Dr. Louis Schiesari: "At autopsy there was atelectasis of the lower lobes. The brain and the entire spinal cord removed with the dura mater and spinal ganglia attached were grossly not remarkable. The microscopic examination of the brain revealed only sparse perivascular collections of lymphocytes predominantly in the white matter and subependymal layers and occasional foci of lymphocytic in-

filtration with degeneration. In the spinal cord there was chromatolysis, dissolution or complete disappearance of the anterior horn cells, alterations to be ascribed to the axonal degeneration. A

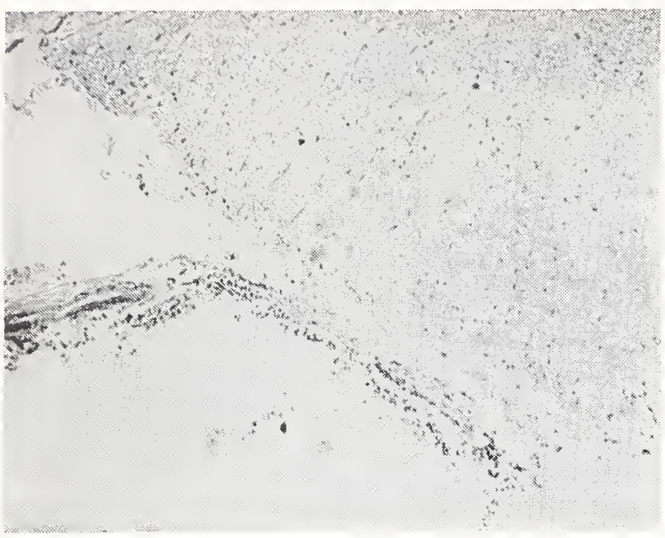


Figure 1. Lymphocytic reaction around pial vessels of spinal cord.

heavy infiltration of lymphocytes was noted along the pia mater of the spinal cord where capillaries and small vessels were surrounded by a thick coat of cellular exudate. The roots of the spinal ganglia and the peripheral nerves were affected to about the same extent. There was severe edema of the myelin sheaths which appeared beaded and swollen and a moderate lymphocytic reaction. In the areas of maximal damage myelin sheaths and axis cylinders had disappeared. Proliferation of Schwann's cells was evident in most of the sections and occasionally macrophagic reaction was encountered.

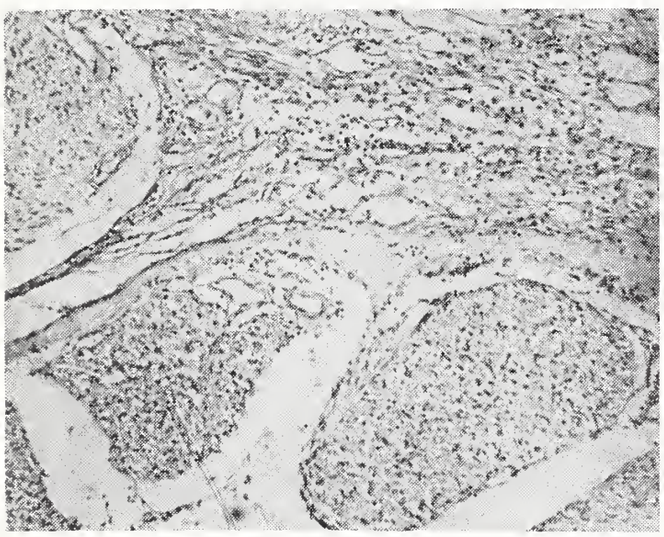


Figure 2. Cross sections of the cauda equina. Sparse lymphocytic infiltration of arachnoid with edema and macrophagic reaction.

"It is evident that both the central and peripheral nervous systems were involved simultaneously, although to various degrees. Thus we are dealing here with some sort of myelopolyradiculoneuritis, the microscopical changes of which are neither specific or diagnostic. I feel, however, that when these alterations are correlated with the spinal fluid abnormalities and the clinical manifestations, the diagnosis of Guillain-Barré syndrome, proposed by Dr. Hodges, can be sustained. Since the course was characterized by a progressive ascending paralysis with fatal termination, I think that Landry Guillain-Barré is the appropriate term.

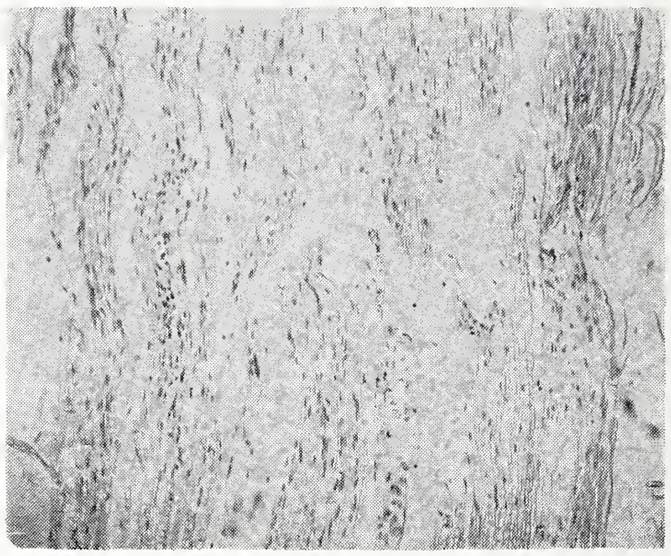


Figure 3. Peripheral nerve. There is scant inflammatory reaction, and degenerative changes predominate. Note swelling, fragmentation, and disappearance of myelin sheaths and axis cylinders.

"The causes of this syndrome are still obscure. Quite a few cases complicating infectious mononucleosis have been reported, but in most instances the syndrome appeared as an isolated clinical entity. Virus and bacteriological studies have been negative. It is of interest to mention that malignant hypertension developed during the course of illness in about one-fifth of the cases, and it has been suggested that this complication could be related to the involvement of the spinal roots." ★★★

1190 North State Street

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SPECIAL ARTICLE

Medical Education in Mississippi

Part I of III

ZEB VANCE BAUCUM, M.D.
Jackson, Mississippi

With its dedication on July 1, 1955, the University of Mississippi School of Medicine became a focal point for Mississippi medicine. As it is located only a short distance from three hospitals, both state and county health departments, the headquarters office of MSMA, and numerous other medically centered agencies, it stands as both a physical and symbolic hub of state medical activity.

Tied up in the University School of Medicine and Hospital is the entire history of medical education in the state. The story begins with the clergymen, America's first "medical men," and continues through the "diploma mills" to the present.

Part I is presented in this issue with parts II and III to follow in the February and March Journals. Dr. Baucum, who was graduated from the University in June, 1960, wrote the paper as his senior thesis.

The University of Mississippi School of Medicine and Hospital stands today as one of the most beautiful, modern, and well-equipped medical facilities in the world. It is located in Jackson, Miss., on a rolling, spacious plot of 600 acres near the intersection of Woodrow Wilson Drive and North State Street. On this same land once stood the Mississippi State Asylum and, later, the Highway Safety Patrol. The principal structure towers seven stories above a spacious basement level, standing as evidence of the courage, ingenuity, planning, and hard work which made it possible. Today, Mississippi can be proud of this institution, but it was not always this way. . . .

With the possible exception of clergymen, who served as America's earliest "medical men," Mississippi's early medical history parallels that of the nation in general, although the state lagged somewhat behind in point of time. This is not offered as criticism, because, in fact, the first medical school (the Medical College of Philadelphia, now the University of Pennsylvania School of Medicine) was established in the United States in 1765 and Mississippi did not become a state until 1817.

A comparative study of Mississippi's medical progress with that of the United States in general is analogous to comparative embryology or comparative anatomy. Thus, the earliest formally trained physicians in the United States were of necessity educated in foreign countries. Likewise, Mississippi's earliest formally trained physicians were educated on "foreign" soil, primarily, of course, in neighboring states but in other states and some foreign countries as well. What might be considered another comparative era was the training of physicians by preceptorship. As this was true of early America, so was it true of early Mississippi. Paralleling this era was the practice of persons simply "adopting" the title of "doctor" and assuming medical practice with little training. This was possible because of the early lack of legal control.

The next step in medical education was the establishment of "diploma mills" or "second rate" medical schools. This practice flourished primarily during the last half of the 19th century but carried over to the first few years of the 20th century. While the practice was more popular in other states, it entered Mississippi with the establishment of the now defunct Mississippi Medical Col-

lege in Meridian. It is not the purpose of this paper to state whether this school was intended as such or whether it was the victim of circumstances, but to say it was so intended would be an unjust statement without any basis in fact. Another example is the long since defunct and almost completely forgotten Meridian Medical College which existed more than two decades before the Mississippi Medical College.

Many of these schools were organized and operated by private physicians and most of them were without university affiliation. There were few standards for the quality of education and most of the schools were operated for profit or prestige.

GROWTH OF SCHOOLS

The number of schools grew rapidly during this period. In 1800 there were only four medical schools operating in what was then the United States. By 1899 there were 156 medical schools of all types in addition to 10 graduate medical schools which were chiefly concerned with the teaching of specialty courses. This total does not include the nearly 350 medical schools that were opened during the 19th century but ceased operation before the turn of the 20th century.

Of the 156 schools operating in 1899, only one, Johns Hopkins University, required a college degree for admission. Other schools' admission requirements ranged from ability to pay the tuition fee through varying amounts of premedical training.

It is not a truism that all proprietary schools were bad and all university schools were good. No doubt some of the proprietary schools were operated by conscientious persons sincerely interested in offering a good medical teaching program. Moreover, of the 74 medical schools operated as departments of universities or colleges, probably close to one-half were deficient in one way or another, and were often treated as the "orphans" of the university. Many of the university schools had just as inadequate admission requirements as the proprietary ones. In fact, a few universities' requirements to enter medical school were less than their requirements to enter the academic colleges. The budgets of many university affiliated medical departments were disproportionately less than the budgets of other departments. Some universities had such superficial connections with their medical departments that they not only did not support them, but they did not control them. Some schools, particularly endowed institutions, in effect merely "loaned" their names to proprietary medical schools.

During this late 19th century period of rapid medical school development, Mississippi's first medical school was established. "Kirk's Clinical Institute of Medicine and Surgery" was issued a grant of charter by the state of Mississippi on April 27, 1882, with corporate domicile at Meridian. The corporation name was changed to "Meridian Medical College" on Aug. 4, 1884. There is no record of how long this school operated, if it operated at all. The list of existing and extinct medical colleges in the United States published in the Aug. 16, 1919, *Journal of the American Medical Association* does not mention it. The records of the AMA Council on Medical Education and Hospitals hold no information on the Meridian Medical College, and there is no record in the Mississippi Department of State of what disposition was made of the grant of charter.

The need for formal, university controlled medical education in Mississippi was recognized long before it became a reality. As early as 1870-71 the Board of Trustees of the University of Mississippi, under the chancellorship of Dr. John Newton Waddel, passed a resolution citing this need. The board further specified that the University's medical department should be patterned after "the plan in the University of Virginia, which has proved to be so eminently successful, just as soon as resources of this institution shall have increased to a sufficient amount to admit it." An announcement to this effect was carried in the University of Mississippi catalogues from 1870-79. Because no provision was made for a medical department's establishment, this announcement was dropped from the catalogues published after 1879.

REASONS FOR DELAY

There are several reasons why a medical department was not established during this period. First, the board's interest may have been more apparent than real, for it came at a time when it was considering a change from the close college system to a university system. Second, the problem of available finances undoubtedly entered the picture. Third, opponents of the medical department argued that a small town such as Oxford was inadequate for a medical school, primarily because it lacked necessary hospital facilities and because it could not supply adequate numbers of human bodies for dissection. Proponents, however, cited such towns as Charlottesville, Va., and Ann Arbor, Mich., as being no more adequate than Oxford but with medical schools located within their limits. Nevertheless, no positive action was taken during this period.

The next mention of a medical department was made in the 1894-95 session catalogue. At this time the University had only two departments: (1) the department of science, literature and arts, made up of 25 schools and (2) the department of professional education, made up of only one school, the school of law, established in 1854. The brief announcement, carried under the heading of the department of professional education, read: "It is hoped that in the near future the University will be able to establish schools of medicine, of pharmacy, and of engineering." By this time, Dr. Robert Burwell Fulton had been named chancellor of the University, succeeding Dr. Edward Mayes in 1892. On June 20, 1899, Dr. Waller S. Leathers was elected to the University faculty as assistant professor of natural history and geology. Whether or not his appointment was made with an eye toward establishing a medical school is not definitely known. Nevertheless, it proved to be a step in that direction. He and Chancellor Fulton soon began formulating plans for a medical department. It has been reported that Chancellor Fulton's interest in establishing a medical school at the University grew out of a suggestion made to him by Dr. Peter Rowland, then president of the Mississippi State Medical Association.

FINANCIAL PROBLEMS

These early medical school advocates faced the problem of securing finances. They argued to the Legislature and the University's Board of Trustees that Mississippi was one of the few older states with no medical education system. They admitted that there was little demand for more mediocre medical schools, but pointed out that there was a real need for superior institutions.

The fact that the University already taught many courses of the first two years was an economic advantage, as the school already owned much of the needed equipment. Another strong argument was the approximately 350 students who left the state every year for medical education, carrying at least $80,000 to other colleges. It was also argued that a medical school would create a stronger and more influential medical profession in the state. The arguments for a medical school were summed up in the chancellor's statement to the Legislature: "The need for a well-equipped medical school in the state is as definite as the need for well-trained physicians and surgeons."

On June 1, 1903, the Board of Trustees passed a resolution organizing the medical department of the University of Mississippi. The medical department was to offer the first two years of the course in medicine. Less than one month prior to this action, on May 5, 1903, the Association of American Medical Colleges, meeting in New Orleans, had adopted a resolution giving full recognition to medical schools offering only the first two years in medicine, terming them "medical schools which do not give diplomas." Although the precedence of two year schools had been set by such colleges as the University of Kansas and the University of North Carolina, the AAMC's action probably influenced the establishment of the Mississippi two year school.

A NEW VIEWPOINT

Despite the recognized need for a formal university-controlled medical education program, many Mississippi physicians opposed the two year school maintaining that a large city was necessary for medical teaching. Fortunately, however, radical changes in the best U. S. medical schools were occurring due to a growing advocation of separate teaching of scientific and clinical medicine. Many educators pointed out the disadvantages inherent in allowing students to attend clinics before they had the basic medical sciences. They argued that such practices frequently resulted in the students becoming so involved in clinical material that they lost interest in the study of the basic science material.

The proponents of a Mississippi medical school were most interested in this new educational viewpoint. They became convinced that the two year school was in accordance with modern methods of instruction, but that it should be begun with the understanding that the last two years would be added when the University could secure a hospital in which the clinical branches could be properly taught. A number of other advantages to the students were also pointed out, including such things as small classes, two years' association with men who were masters in their fields, special personal attention when needed or desired, opportunity of witnessing various demonstrations, and the advantage of a university environment.

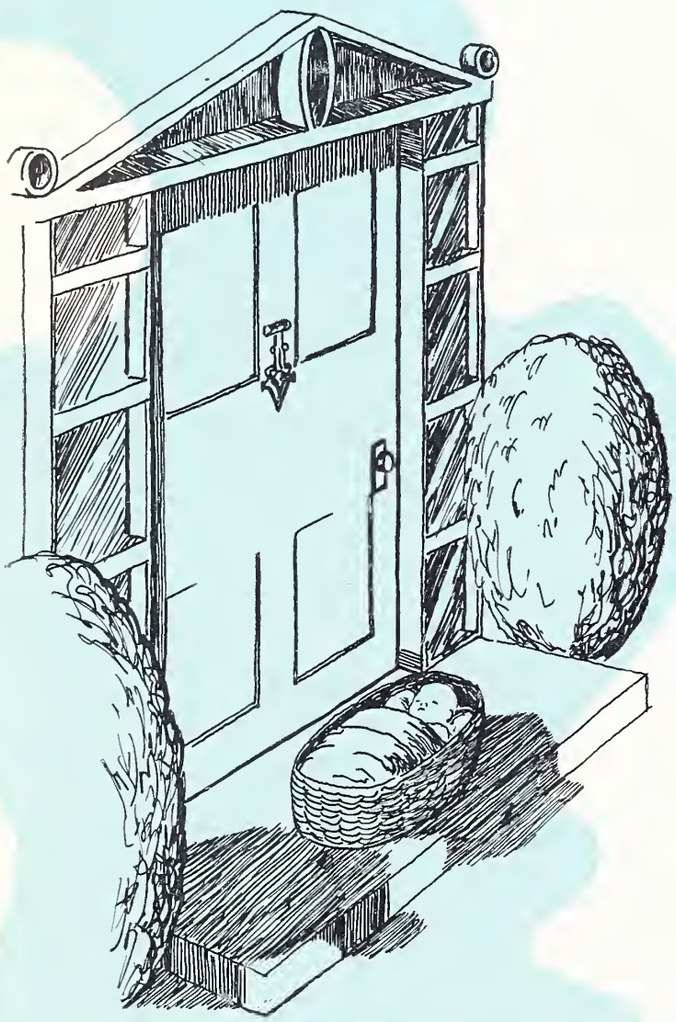
The medical school of the University of Mississippi opened for its first session on Sept. 17, 1903, becoming the second school in the department of professional education, and the 27th school in the University. Sixteen students were registered for this first session which was scheduled for nine months and divided into three terms of three months each. The first faculty, including both administrative and teaching personnel, included 16 or 17 members.

(Part II will appear in the February, 1961, issue of JOURNAL MSMA.) ★★★

1190 North State Street

What to Do About Adoptic

Lawyer

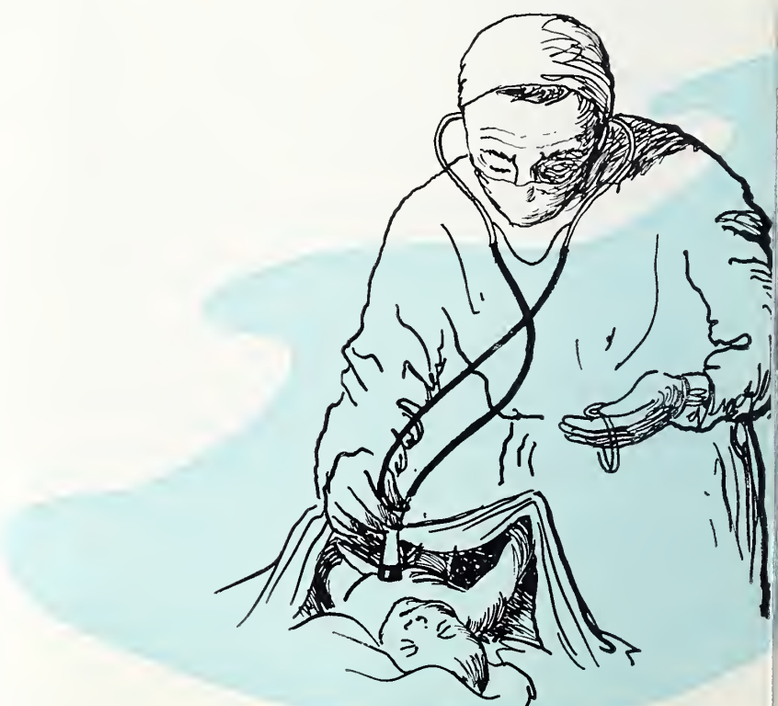


In the late 1800's adoption was a pretty casual affair. Trainloads of children from large eastern orphanages would tour through the Midwest stopping at every large town. The children would line up on the high depot platform forming a single line according to height, and local citizens would simply point out the girl or boy they wanted. The unchosen children would then climb back on the train and travel on to the next stop.

Adoption procedure has changed quite a bit since those days. For one thing, it is estimated that in the United States there are approximately 18 couples who have made formal application for adoption for every child available. This increase of demand over supply has made possible greater protection of the adoptive children.

One agency which has been continuously concerned with adoption procedure is the U. S. Children's Bureau. Dr. Howard Nelson, secretary-treasurer of Delta Medical Society and a member of AMA's Committee on Maternal and Child Care, attended the May 1960, meeting on adoptions called by the Children's Bureau.

The meeting, which was held in Washington,



Doctor,

cial Worker View Their Roles

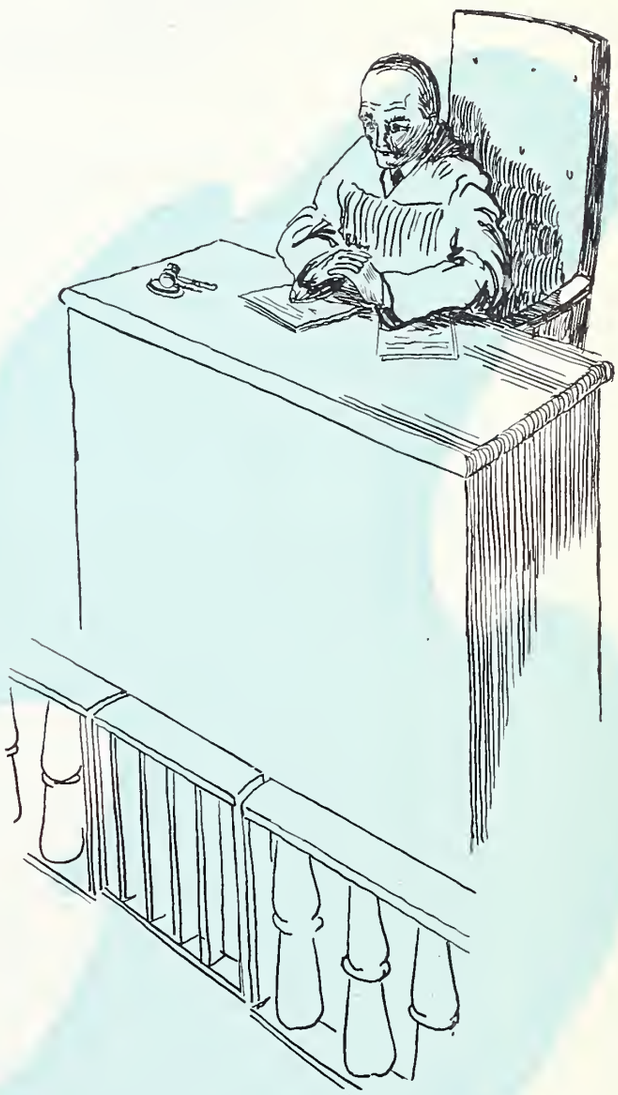
D. C., was planned in order to develop better understanding among the doctor, the lawyer, and the social worker in the areas of adoptions and services to unmarried mothers. The group concluded that local programs outlining the professions' responsibilities in adoption procedures would contribute to a greater mutual understanding.

As a direct outgrowth of the Washington meeting, the Delta Medical Society included a panel on adoptions on the scientific program for its Oct. 12, 1960, meeting. On the panel, Dr. Nelson presented medicine's responsibility. Norman C. Brewer, Jr., attorney at law of Greenwood, discussed the legal aspects of adoption. The social work field was represented by James R. Stokes, program director of the Foster Care Section, State Department of Welfare.

JOURNAL MSMA is happy to publish the conclusions of this panel—which may well be the first of its kind to appear on the scientific program of a medical organization.

(Artwork is by James M. Goodman, Director of Art, Department of Surgery, University of Mississippi School of Medicine.)

ILLUSTRATED BY JAMES M. GOODMAN





The Physician's Role Is Purely Medical



HOWARD A. NELSON, M.D.
Greenwood, Mississippi

ADOPTION HAS EXISTED from time immemorial. It was practiced by the ancient Egyptians, Babylonians, Assyrians, Greeks, and Romans, usually for the purpose of acquiring an heir or successor. Reference is also made to it in the Bible. Moses was adopted by the Pharaoh's daughter and Mordecai took Esther for his own daughter. Adoption originally was a voluntary arrangement between the adoptive parent and the child, made when the child was old enough to decide if he wished a new setting.

Adoption, as practiced in the United States, means the severing of the rights and responsibilities of the natural parents of the child and the creation of new legal ties for both the child and adoptive parents.

The role of adoption in the life of the community is obviously important and of great concern to all citizens. The regular adoption process serves the child, the natural parents, and the community, in that order. Each adoptive placement directly involves one or two natural parents, two adoptive parents, and several professional persons. Because of the complexity of the procedure, it requires the coordinated efforts of the social workers, the physicians, and the lawyers. Representatives of other professions, e.g. psychologists, clergymen, anthropologists, and geneticists, are often needed as well. Certainly the importance of providing a good family setting for a child and the magnitude of the total adoption process command our interest both as citizens and doctors of medicine.

Experience has uncovered many gaps in the knowledge of the social, medical, and legal aspects of adoption. This has suggested the need for extensive research and for revision of many older practices and laws. The need for legislation which will provide legal safeguards for all concerned in adoptions is of primary importance. It is not realistic to believe that any one person, whatever his interest, capabilities, and profession, can adequately conduct this entire procedure alone.

The physician has both direct and indirect responsibilities in adoption. The direct responsibilities concern services to the three parties involved —the natural parents, the child, and the prospective adoptive couple. The indirect responsibilities are those rendered as a consultant to, or as a member of, a social agency practicing adoption, as a member of a hospital staff, as an educator, and as a citizen.

The doctor, whether he be the family physician or obstetrician, is frequently the first person to become aware of an impending adoption. He diagnoses or corroborates the suspected state of pregnancy. He renders antepartum care, delivers the child, and gives postpartum care and such other medical service as is indicated. He should refer the mother to an appropriate social agency where she may receive help for her baby as well as herself.

The health of the adoptive parents is the concern of the physician and should be free from any seriously incapacitating disease so that they will be able to fulfill the usual parental role. If an infant is accepted into a family group, he should have a mother and father who are able to look after his needs, who can participate in many of his activities, and who have a reasonably good expectancy of being with the child until he attains maturity.

In addition to providing medical care, the physician is often placed in the position of counselor

(Turn to page 24)

Secretary-Treasurer, Delta Medical Society, and member, Committee on Maternal and Child Care, American Medical Association.

Law Protects Adoptive Child and Parents

NORMAN C. BREWER, JR., LL.B.
Greenwood, Mississippi



THE MISSISSIPPI LEGISLATURE in the Extraordinary Session of 1955 enacted into law what is now known as "The Adoption Law of the State of Mississippi," as set forth in Chapter 34 of the Laws of 1955 of the State of Mississippi and being Sections 1269-02 through 1269-13 of the Mississippi Code of 1942, Recompiled, as amended.

This new adoption law enacted by the Mississippi Legislature was a far-reaching legislative endeavor and has served to strengthen the adoption laws of Mississippi. To protect not only the adoptive parents but the adopted children, the court procedures for the adoption of children have been removed from the prying eyes of the public and the court records have been made unavailable to all except the officers of the court.

The adoption law of Mississippi provides that any person may be adopted in accordance with the provisions of the act, in term time or in vacation, by an unmarried adult or by a married person whose spouse joins in the petition, provided that the petitioner or petitioners have resided in this state for 90 days preceding the filing of the petition, unless the petitioner or petitioners, or one of them, be related to the child within the third degree according to the civil law, in which case such restriction shall not apply. Such adoption shall be only by sworn petition filed in the Chancery Court of the county in which the adopting petitioner or petitioners reside and in which the child to be adopted resides, or was born, or was found when he was abandoned or deserted, or in which the home is located, to which the child shall have been surrendered by a person authorized so to do.

An innovation in the new law provides for two things. First it requires a doctor's certificate showing the physical and mental condition of the child proposed to be adopted. This certificate of the doctor must be attached to and made a part of the original petition filed in the court. Secondly, attached to and forming a part of the petition must be a sworn statement of all property, if any, owned by the child. In other words, before a child can be adopted under the laws of Mississippi, a bona fide, qualified doctor must examine the child and certify to the court that the child is in good physical and mental condition and is a fit subject for adoption. If the adopted child has property, then a sworn affidavit must be attached to the petition, showing exactly what property the child possesses at the time it is adopted.

The new adoption law goes further and requires the joinder of natural parent or parents in the adoption proceedings. The natural parent or parents can come in in one of two ways. They can either come in voluntarily or they can be summoned by legal process. If they come in voluntarily, they simply file a consent to the adoption proposed in the petition and the law requires that the consent shall be duly sworn to or acknowledged and executed only by the following persons: (1) the parents or parent, if only one parent, (2) in the event both parents are dead, then any two adult kin of the child, within the third degree, computed according to the civil law, or (3) the guardian ad litem of an abandoned child, upon petition showing that the names of the parents of such child are unknown after diligent search and inquiry by the petitioners.

There is one important feature of the new adoption law that I think is particularly worthy of

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Chairman, Board of Bar Admissions, Mississippi State Bar, 1959-60.

Social Worker Serves as Coordinator



JAMES R. STOKES, M.A.S.A.
Jackson, Mississippi

IN DISCUSSING the responsibility of the social worker in adoption, I will use the definition of adoption as a way of establishing new families for some children.

One cannot discuss the responsibility of the social worker without first speaking briefly of the nucleus which gives the social worker his responsibility. This nucleus in nearly all cases is some type social agency providing a structure within the community in which the social worker may use his skills and resources to meet the needs of the various individuals involved in the adoption.

Creation of the family through adoption is not the usual way of having a family. Relinquishment of a child to another family for rearing is unusual and often a painful process. Since the child is becoming a part of a family that is not his own, protections are needed to safeguard him, his natural parents, and his new adopted parents. The accumulated knowledge and experience of the agency and of the social worker, and the social worker's skill are important tools in helping all parties involved in these unusual processes. In recent years social agencies have come to accept the principle that most children who like a permanent plan can be adopted and families must be found for them. The important consideration is that a child needs a family to whom he can belong. While adoption is one way of finding new homes for some children born out of wedlock, it does not meet all the problems growing out of illegitimacy.

Someone has said that the agency focuses on a family for each child rather than on a child for each family. Placement of children and working with their parents are part of the specific responsibilities of the child welfare worker. The store of knowledge gained through repeated experience in working with parents and children is an asset not only to the individual worker but to the profession itself and to other professions.

Another asset of the social agency is the factor of its accountability to the community for what it does or does not do. In one way or the other, adoptions involve the total community. Agencies are authorized to perform their functions and these functions are regulated and controlled. The public is involved in the establishment of agency policy and agencies are accountable to the public. This is not true of an individual involved in an independent adoption.

Confidentiality is an important problem in all phases of the adoption process. The social agency has a particular responsibility to preserve the anonymity of natural and adopted parents in order to offer permanent protection to the child. Records and other important material that will safeguard the child's identity must be preserved.

Another aspect of the social agency's contributions to the adoption process is that the agency responsibility continues for as long or as short a time as the situation demands it. It does not terminate with placement of a child in an adoptive home but continues until the adoption has been approved by the court and many times even longer.

We agree, however, that social agencies have an obligation to hold together the unique skills and contributions of other professions—particularly medicine, law, and religion—and to use them in meeting the needs of the child, the natural parents, and the adopted parents. In addition to using knowledge of the medicine and the law, the social agency may also require consultation with psychologists, geneticists, anthropologists, and sociologists.

Program Director, Foster Care Section, Mississippi State Department of Public Welfare.

The social worker as an individual also brings into adoption a uniqueness seldom found in other professions. One of the more respected traits of our profession includes knowledge and understanding of human behavior and the techniques that help individuals in their social adjustments. In adoption, the social worker helps the various parties—the child, the natural parents, and the adoptive parents—clarify for themselves what they are doing and what they want to do, and gives each of them support until a satisfactory solution has been reached. In this process the total situation is considered and choice is given and responsibility taken when this seems to be indicated.

The social worker within the agency setting carries responsibility in adoption to three interrelated groups of people. First of all, the social worker carries a responsibility to the natural parents of the child. The social worker with her unique skills can often help these parents arrive at a plan for their child and for themselves that will represent a lasting decision for them and one in which they can have confidence.

THE UNMARRIED MOTHER

The unmarried mother is often in a vulnerable position in our society. If she is to have the safeguards she requires, she must be offered practical service and coordinations for her care and protection during pregnancy. This may be medical care, financial help, shelter care, on legal advice. Perhaps most important of all, she needs the kind of continuous relationship with the social worker that will enable her to make an early decision for her child both for the child's sake and her own. It cannot be overlooked that adequate planning must take place for the unmarried mother as well as for the child whom she may surrender. Without some understanding of herself, she may become immobilized. I think we can all readily agree that an unmarried mother comes to us laden with emotional ties. With the severance of these emotional ties, a deep understanding, and skillful handling, not only the mother but the child is less likely to be damaged. Once the decision is made, the social worker must stand by to help the natural parents in carrying out suitable plans. The important aspect of this whole process is that the future as well as the present is taken into consideration.

The second person with whom the child welfare worker must deal is the child. Before an adoptive plan can be considered, a decision must be made as to whether or not a permanent separation from the natural parents will meet the child's needs. In meeting this responsibility, the agency and the social worker put into focus finding a family for the child rather than a child for the family. The social worker must have a knowledge of the basic needs of all children, and she must be able to determine the special needs of each child. Using this information, the social worker and the agency try to choose insofar as possible a family that appears to have the special qualities that will make it possible for the child to develop his potentials for growth.

FOSTER HOMES

The social worker and the agency also must have on hand for immediate use a number of homes available to give good care to children during the time the permanent plans are in process. The agency also must have access to these homes in case the child needs further study or is unadoptable. Permanent plans for the child should be made at the earliest possible time. As an assurance to the adoptive family, however, early plans for placement of the child can be made only when a great deal is known about the background of the child's natural parents. Here the social worker becomes an invaluable tool in planning for a prospective adoption.

Many times legal entanglements exist that interfere with the child's being released for adoption. Here is the time the agency seeks competent legal counsel so that diffculties may be resolved whenever possible.

Even after a child has been placed into an adoptive home, he may need direct or indirect help from the social worker. The social worker is also responsible for helping adoptive parents in understanding the child's reaction to change or their own feelings about him. Such help to these new parents gives both the child and his parents better security.

ADOPTIVE PARENTS

Adoptive parents compose the third group to which the social worker contributes. His work with them has a direct bearing on the success or failure of the adoption.

One of the problems complicating the whole adoptive process is the difference between the supply and demand for white infants. Childlessness plus a desire to adopt a child do not in themselves mean that a couple will make good adoptive parents.

The social worker's understanding of human behavior equips him to make an evaluation of the applicants. The adoptive parents must have good health, a stable marriage, exhibit a degree of maturity, and have evidence of some ability to adjust

to the reality of their childlessness. They must be able to see the child as a human being with his own personality who will need love and affection and a sense of belonging. While the adoptive parents will get great satisfaction from nuturing, stimulating, and encouraging the child, the primary goal in their care of the child is to help and love him for his own sake. They should be people who are warm, flexible, understanding, and who have a desire to help a child develop his potentialities.

FACTORS IN ADOPTION

The social worker helps adoptive applicants with an understanding of what is involved in adoption and whether or not adoption will meet their needs. Both the husband and wife must wish to adopt a child, and the worker has the responsibility of determining that they both wish to do so.

After a home has been approved and a child tentatively selected for it, the social worker gives the adoptive parents information about the child's background, his special needs, and his potentials, and helps to decide whether or not this is the child they want. The worker also plans for the actual placement of the child and helps the child and his adoptive parents prepare for it.

POST-PLACEMENT HELP

After placement of a child, the worker gives the adoptive parents any assistance they require. The social worker recognizes that factors exist in adoption placement that are not inherent in normal parenthood. They will do everything they can to help adoptive parents cement their relationship with the child.

Again accurate record keeping and a responsibility back to the community enter the picture with adoptive parents.

MEDICINE'S IMPORTANCE OBVIOUS

Throughout this paper, I have purposely omitted the medical profession. The medical profession is so intricately wound into adoption that its importance is obvious. Certainly services need to be given to the natural parents of the child, which in most instances means the unmarried mother. It is only with the understanding and medical skill of a warm, accepting physician that the unmarried mother can be aided to arrive at a decision concerning her child. It is also an absolute necessity that the child be in the hands of a competent physician. From the time it is delivered to his adoption, the physician indirectly guides the agency and the social worker in making adequate plans for this child. The understanding and skill of the physician again plays a very definite part with the adoptive couple. Sterility is not an easy thing to recognize or accept. Again the physician takes on the robe of a social worker in helping adoptive parents accept the situation of sterility. Throughout the adoptive placement the physician plays an integral and vital role in helping cement the relationship between the adoptive parent and child.

Certainly without the assistance of the medical profession, the social worker profession would not be able to operate in adoption or any other phase of its responsibilities. ★★★

5650 Brentwood

to the unmarried pregnant woman as well as to the prospective adoptive parents.

The doctor is best equipped to provide diagnostic appraisal and medical care during the newborn period in the hospital and thereafter in the home of the natural parents or in the foster home. He is called upon to treat, to evaluate, and to interpret the handicaps of children who are being considered for adoption.

The physician who diagnoses pregnancy in an unmarried woman is in a particularly advantageous position to refer her to an appropriate agency for counseling and aid of whatever type may be required. Similarly, he often refers childless couples to agencies where they can apply for a child for adoption.

MEDICAL INFORMATION

The physician may serve as a consultant to a social agency. He advises as to the health and development of the infant, the medical background of the natural parents, and the physical status of the adoptive parents. He must be willing and able to interpret the prognosis of persons with chronic disease.

The physician should participate in establishing hospital policies which insure adequate medical care for the unmarried pregnant mother and her child. This requires social services as well as antepartum, obstetrical, and postpartum care. Some hospital staffs, for example, have instituted policies which require that social service consultation must be offered to the mother before her infant can be placed for adoption.

The mere mention of child adoption always evokes a warm emotion and a feeling of thankfulness in all parents of adopted children. The real

concern in this procedure today is in those cases in which the adoption is not arranged through an authorized agency.

EVALUATION OF CHILD

The role of the physician in adoptions should be a medical one only. He is not a social worker, nor should he try to substitute for the legally constituted authorities in this important function. The physician is essential only because he can give advice on matters of health, growth, and development, genetic influences relating to the infant, and the natural mother's prenatal care. The details of the birth and medical and developmental records on the infant are all extremely important factors in the final decision as to placement. Few, if any, human beings are perfect specimens. This applies for babies up for adoption.

Since each individual in our society has dignity and worth, the purpose of all efforts toward protecting children in adoption is to insure for each child the best possible opportunity to fulfill his greatest potentialities as a human being. ★★★

308 Fulton Street

LAW'S PROTECTION / Brewer

note and that is the fact that in the case of a child born out of wedlock, the father shall not be deemed to be a parent for the purposes of the act and no reference shall be made to the illegitimacy of such child. The new law sets out in detail the exact steps that are required to be taken in the case of the adoption of a child, from the filing of the petition through to the entry of a final decree. The law says that a final decree of adoption shall not be entered before the expiration of six months from the entry of the interlocutory decree, except where the child is a stepchild of a petitioner or is related by blood to petitioner within the third degree according to the rules of the civil law, or, in any case in which the chancellor, in the exercise of his discretion, shall determine from the proceedings and evidence in such cause that the said six months' waiting period is not necessary or required for the benefit of the court, the petitioners, or the child to be adopted.

It occurs to me that physicians would be interested in knowing exactly what a final decree of adoption actually adjudicates. After all the requirements of the act have been fully met and the chancellor is satisfied that the adoption is the best thing for the adoptive parents and the child proposed to be adopted, there is entered a final decree. This decree adjudicates the following:

(1) That the child inherit from the and through the adopting parents and shall, likewise, inherit from the other children of the adopting parents, to the same extent and under the same conditions as provided for the inheritance between brothers and sisters of the full blood, by the laws of descent and distribution of the State of Mississippi, and that the adopting parents and their other children shall inherit from the child just as if the child had been born to the adopting parents in lawful wedlock.

(2) The child and the adopting parents and adoptive kindred are vested with all the rights, powers, duties and obligations, respectively, as if such child had been born to the adopting parents in lawful wedlock, including all rights existing by virtue of the laws of Mississippi.

(3) That the name of the child shall be changed, if desired.

(4) That the natural parents and natural kindred of the child shall not inherit by or through the child, except as to a natural parent who is the spouse of the adopting parent, and all parental rights of the natural parents or parent shall be terminated, except as to a natural parent who is the spouse of the adopting parent.

It is interesting to note that there is nothing in the act which restricts in any way the right of any person to dispose of property under a last will and testament and, while the adoption statute sets forth all rights of inheritance between the adoptive parents and the adopted child and the relations of both, there is nothing that prohibits an adult from making a will that disposes of his property according to his own wishes.

REVISION OF CERTIFICATES

After the final decree of adoption is entered, a certified copy of the final decree is furnished to the Bureau of Vital Statistics, together with a certificate which has been signed by the clerk of the court giving the true or original name and the place and date of the birth of the child. Thereupon, the bureau prepares a revised birth certificate which contains the original date of birth with the place of birth being shown as the residence of the parents at the time the child was born, but with the names of the adopting parents and the new name of the child. It is also noted that the fact that a revised birth certificate is issued shall be indicated only by code numbers or some letter inconspicuously placed upon the face of the certificate. The word "revised" shall not appear and does not appear upon the revised birth certificate. The original birth certificate is then removed and placed with the certified decree of adoption and the certificate in a safety lock drawer or vault and the same are not public records and shall not be divulged except upon the order of the court render-

ing said final decree. To all intents and purposes, the revised certificate shall be, and it is, the birth certificate of the child.

The new act does everything it is humanly possible to do to protect the adopted child. For example, no reference is required to be made as to the marital status of the natural parents of the child, nor shall any allegation or recital be made therein that the child was born out of wedlock in any petition filed or any decree entered upon such petition. In the decree reference to the child is made by the name conferred upon it by the court, rather than by its original name, if the name of the child has been changed. The style of the cause and the docket entry thereof shall recite only the names of the petitioners and that the case is for the adoption of a child described in the petition.

In addition to this, all proceedings under the act are held to be confidential and shall be held in closed court without admittance of any persons other than interested parties, except upon the order of the court, and all the reports and files and records pertaining to adoption proceedings are confidential and shall not be considered public records under the law. They are withheld from inspection or examination by any person except upon the order of the court in which the proceeding was had or good cause shown. This does not mean that officers of the court, such as attorneys, are not given access to such records, upon request. The law provides that a separate adoption docket be kept by the chancery clerk and a separate minute book on adoption proceedings, both of which are kept under lock and key at all times and are not available to the public scrutiny.

If we may sum up in few words the intent, purposes, and effect of the Adoption Law of the State of Mississippi, we might say that every effort has been made to take away from adoptions any stigma of disgrace and to make the proceedings as secret as possible so that when the adoption is concluded, the adoptive parents and the adopted child are placed in the same status as natural parents and the children born in wedlock to these natural parents. The protection afforded by the new adoption law of Mississippi is a double one in that it protects not only the adopted child, but it protects the adoptive parents. ★★★

107 West Market Street

ONE FOR THE MONEY

Calling for more Federal funds for medical research and education, Dr. Leo G. Rigler, executive director of the Cedars of Lebanon Hospital, Los Angeles, anticipated the question "why Federal rather than private or local funds?"

Paraphrasing Willie Sutton's famous reason for robbing banks ("that's where the money is"), Dr. Rigler said: "Like it or not, with our present tax system, our Federal government is where the money is."

JOURNAL OF THE
MISSISSIPPI STATE
MEDICAL ASSOCIATION

Volume II, Number 1

January 1961

EDITORIALS

'Volume II, Number 1'

JOURNAL MSMA, 1960's fledging of paper, ink, and an idea, observes its first birthday with this issue. Whether it earned its freshman grades or not is something for its faculty of readers to say. This much, however, is apparent: The JOURNAL has been accorded a warm and generous reception in the distinguished company of the American scientific press. Its growth belies its youth, something aided, not in the least, by contributions from able authors and substantial advertising from those who recognize its importance as an ethical communications medium.

There is no secret success formula for building a new scientific publication other than rigorous application of the old saw of 10 per cent inspiration and 90 per cent perspiration. JOURNAL MSMA was begun as a team activity and remains such today. Each issue represents hundreds of work hours by dozens of individuals. What begins with the distinguished author of international repute must be carried through the unbelievable complex of scientific journalism to the skilled technician at the printer's stone.

In volume one, number one, it was stated editorially that the JOURNAL ". . . is not now nor will it ever be faultless but its mightest effort will be to rise to usefulness and to overcome mistakes and undoing." This is reaffirmed with renewed purpose. The Board of Trustees under whose supervision the JOURNAL is published, the Committee on Publications, the editors, and staff ask all readers for their counsel, constructive criticism, and comment. Their total aim is to fulfill the assigned mission of providing a scientific and socioeconomic vehicle especially adapted to the needs of the association, a reliable and authoritative communications medium among the membership containing a sufficient variety of presentations and information to achieve wide usefulness. At the same time, the JOURNAL team recognizes that the publication cannot and should not be all things for all purposes.

To these objectives of service this second volume is dedicated. To every reader and contributor go the appreciation of those charged with producing the JOURNAL. To achieve usefulness, journalistic character, and integrity reflecting the association's 104 years of service is and will be the JOURNAL's quest.—L.W.L.

The Lost Doctors

The intense competition that prevails for talent among the various industries and businesses is creating a serious situation for our own profession. Deans of medical schools are deeply concerned about the decrease in applications for entrance from the top level students. For the last three to five years the number of "A" students that have applied to medical schools has dropped and selections have been made from a larger proportion of "B" students and lower. This is a new experience

for medical schools, because there have always been an adequate number of these top level students to select. In order to assure a continuation of the high standards of medicine in this country, we cannot lose the best students to other professions.

It seems that the reason for this is that we are being out-recruited by representatives from the other fields. The technological age of the last half of our century is demanding a more educated, a more highly intelligent person. The rewards offered by these various professions often appear more enticing and more challenging than those to be gained in medicine. The appeal to our youth is being made on the basis of the possibilities of adventure and service. We are living in a highly imaginative age. The fantasy of the previous generation is the reality of today. As our world shrinks, and the far away place and person of yesterday is now a close neighbor, we find ourselves moving into an area where human understanding and a life of service is more necessary than ever before. It is on this basis that fields such as electronics, chemistry, nuclear physics, and mathematics are appealing to our youth. They are offering more than material rewards. They are offering an opportunity to be creative and imaginative—an opportunity to have a personal hand in the far reaching contributions to humanity.

Of course medicine has always had this appeal. We need to renew this challenge. We must dust off the pedestal of medicine so that once again it will loom as a shining platform, as it has in the past, to which every boy and girl aspires. Perhaps we have been resting too much on the laurels of the past so as to give the mistaken impression that there is no more future to medicine. In reality, the challenge of medicine is greater today than it has ever been. In the years ahead, the point we have reached at this time will seem as primitive to the physicians of tomorrow as the days of Pasteur and Koch seem to us today. We must renew the symbol of the man in the white coat and re-establish the nobility of medicine as a profession.

The profession of medicine is closer to humanity than any other. The challenge of medicine is more far-reaching than in any other field. The need for the highest type individual is therefore greater than it is in any other profession. When we can once again establish this appeal, we will not be out-recruited any longer. In fact, to survive we must not permit this situation to continue.
—T. J. M.

LETTERS

SIRS: The president's page, "Interpret, Please," in the JOURNAL OF THE MISSISSIPPI MEDICAL ASSOCIATION for November 1960 has been read with interest by members of our staff. It is gratifying to us that you have considered it important to bring this timely discussion of drugs and the pharmaceutical industry to your many readers.

ROBERT J. BENFORD, M.D.
DIRECTOR OF MEDICAL RELATIONS
PHARMACEUTICAL MANUFACTURERS ASSOCIATION
WASHINGTON, D. C.

NEW MEMBERS

The following physicians have been elected to membership by their respective component medical societies in the Mississippi State Medical Association and the American Medical Association:

BOOTH, WILLIAM HARPER, JR., Lambert. Born Maben, Miss., Oct. 12, 1929; M.D., University of Tennessee School of Medicine, Memphis, 1956; interned Baroness Erlanger Hospital, Chattanooga, Tenn.; otolaryngology residency, University of Tennessee, Memphis, one year; Lieutenant, U. S. Naval Reserve, two years; elected Nov. 9, 1960, by Clarksdale and Six Counties Medical Society.

JOHNSON, WHITMAN BENEDICT, JR., Clarksdale. Born Clarksdale, Miss., Dec. 2, 1928; M.D., University of Pennsylvania School of Medicine, Philadelphia, 1955; interned Baptist Memorial Hospital, Memphis, Tenn.; surgery residency, Baptist Memorial Hospital, Memphis, four years; elected Nov. 9, 1960, by Clarksdale and Six Counties Medical Society.

WHITEHEAD, THOMAS BENNETT, Ellisville. Born Hattiesburg, Miss., Dec. 19, 1931; M.D., University of Tennessee School of Medicine, Memphis, 1957; interned Mobile General Hospital, Mobile, Ala.; general practice residency, South Mississippi Charity Hospital, Laurel, one year; Corporal U. S. Navy, two years; elected Sept. 11, 1960, by South Mississippi Medical Society.

Book Reviews

The Management of Fractures and Soft Tissue Injuries. By the Committee on Trauma, American College of Surgeons. Illustrated with 372 pages. Philadelphia-London: W. B. Saunders Company, 1960. $5.00.

As the title indicates, this is a combination of two books that have been published separately in the past but are now combined with the outline on fracture treatment being followed by outline on early care of soft tissue injuries. This two-in-one edition causes much duplication of material as each book in the past contained chapters on the care of head injury, spinal column injury, neck injury, and facial injury. In addition, each section give considerable detail about x-ray positions and techniques which are tedious as well as duplicated. Each chapter attempts to be autonomous and this leads to repetition.

The book is simply and clearly written and is easy to understand, but it contains very few illustrations although the index and bibliography are ample. There is little room for disagreement with the principles set out in the book except perhaps those in the care of the head and spinal cord injuries, and I realize that these are still controversial subjects. I found that the chapters on care of shock, burns, and bites to be the most informative and interesting.

I would only recommend this book for students, interns or other very young medical practitioners.

JACK H. PHILLIPS, M.D.

Outline of Pathology. By John H. Manhold, Jr., D.M.D., and Theodore E. Bolden, D.D.S. 340 pages. Philadelphia-London: W. B. Saunders Company, 1960. $4.75.

In the preface, the authors state that this book has been written to interest medical and dental students, interns, residents, and general practitioners. It was felt that these individuals in searching for specific material usually found that the standard pathology text gave much more than needed whereas, the available abridged versions were usually too incomplete.

They state that their intent has been to set forth "a complete outline of subject matter of pathology so as to serve (1) the student as a basis for study, and (2) the graduate as an adequate recall instrument." This book fills the requirements set down by the authors.

Students will disagree about the need for some conditions that have been included and some that have been omitted. This is an expected defect in any outline of this type. The arrangement of the book is standard, being divided into a section on general pathology and a section on systemic pathology. Many rather vague statements are made, but the authors expect that further study in a standard text will be necessary for more specific details.

For the medical or dental student, the outline should be an adequate basis for study. For the general practitioner who has been out of touch with the field of pathology for some time, the outline of pathology of a specific organ should be valuable. For the advanced resident, and for the practicing physician who has had specialty training in any field, this outline should not be necessary.

C. B. MITCHELL, JR., M.D.

Domestic Journals

Medical Treatment of Endometriosis. Mason D. Andrews, Clin. Obst & Gynec. 3:492 (June) 1960.

The author presents arguments for the desirability of developing a safe medical treatment of endometriosis in as much as many patients with this disease desire further childbearing, have symptoms which are disabling but not severe enough to warrant surgery, or present a poor risk for surgery. Since endometriosis produces disability through the response of ectopic endometrium to the normal hormonal cycle, the logical therapeutic agents to be used in medical treatment are hormones.

A review of the effects of estrogen therapy in various dosage schedules is given. This therapy is limited by side effects including breakthrough vaginal bleeding, excessive fluid retention, occasional severe uterine hemorrhage, and nausea and vomiting. The theoretical dangers of encouraging the growth of endometrial carcinoma

through the action of unopposed estrogen is also stressed.

Androgen therapy is also discussed. The basis for the use of androgens lies in the ability of these agents to: 1. directly counteract the effect of estrogen on ectopic endometrium and 2. suppress the pituitary in stimulation of endogenous estrogen production. He suggests a trial of oral testosterone for six weeks in a dosage of 10 milligrams per day. If improvement occurs, he repeats the course. The side effects of the use of androgens are masculinization, including hirsutism, acne, and clitoral hypertrophy. Increased libido is occasionally reported.

The availability of oral progestins has made possible a rational therapy based on the development of "pseudopregnancy." Starting dosage of these agents is in the range of 10 milligrams per day with periodic increase of dosage to a maximum of 40 milligrams per day. Therapy extends for 24 weeks. There were subjective and objective signs of improvement in 23 of 24 women. Improvement was maintained after treatment in 22 of these women. Side effects of oral progesterones are in general the usual signs and symptoms of pregnancy. There was some nausea which was easily controlled. Breakthrough uterine bleeding was troublesome but could be managed by increasing the dosage. The major disadvantage of oral progesterone therapy is its present high cost. From subjective and objective evidence this appears to be the most satisfactory medical form of treatment of this desease, although patients have not been followed for a sufficient length of time to assess the duration of improvement following treatment.

LOIS M. MOSEY, M.D.

The Monster Test. Edward Lehman, Arch. Gen. Psychiat. 3:335-344 (Nov.) 1960.

Presenting proverbs to patients for explanation of their meaning has long been a method of getting information on ability to deal with abstractions on a verbal level. In suspected cases of brain damage this function, among other things, may be important to test. Little, if anything, has been written of attempts to qualitatively assess such tests.

Dr. Lehman describes an interesting arrangement he has adopted on a qualitative basis and states the reason for his arrangement as well as his method of presenting the proverbs.

Arrangement: He presents the following four proverbs in the sequence given:

1. "Don't cry over spilled milk."
2. "Don't judge a book by its cover."
3. "When the cat's away, the mice will play."
4. "Two heads are better than one."

Procedure: The proverb is given and the patient asked "what does it mean?" If the patient's response shows good ability to abstract the meaning, he is asked if he has heard it before. The response given is disregarded if he acknowledges having heard the saying previously. When his response is a concrete repetition of the surface meaning of the proverb, the examiner inquires, "Could it have a more general meaning?" In this manner the first three proverbs are presented and an idea of how the patient deals with abstractions is obtained. Then the last proverb is offered "Two heads are better than one." This proverb deals not only with an abstraction which it contains, but also with the strength of the listener's body image and capacity—at least in respect to the proverb's subject matter—to soundly test reality.

The proverb may evoke a concept of two people or of two heads on a single body for example. The subject is given a pencil and paper and



"The doctor will see you just as soon as he finishes going over his morning mail."

asked to "draw the two heads you picture in your mind when you think of the saying 'two heads are better than one.'" Almost always a drawing can be obtained. If only heads are drawn the subject is urged to "draw the rest, below the heads."

Interpretation of Results: Children under 10 and older mental defectives of IQ 50-70 may give no verbal responses but will give a drawn response. The responses are scored with a three or four letter sequence. Letter one may be K, L, M, N, or O ("Known already," "Lone response," "Monster response," "Normal response," "Zero response") and they refer to the oral responses. The second letter may be as indicated above, but refer to the drawn response. Thus MM equals a verbal response of a monster and also a drawn monster. A third letter may indicate the type of monster (as S for Siamese or J for Janus or P for parasitic). The reader is referred to the article itself for details of interpretation and recording.

The Results: The author states that there are significant differences between the psychotic, and neurotic, and the mentally deficient (as indicated above) on this test. The general rule was that normal responses are not evidence against psychosis, but with infrequent exceptions monster responses come only from psychotics. The author feels the test may sort out brain damage (organic) from nonorganic cases. It is simple, consumes little time, and is easy to administer. It is summarized here because some physicians may wish to look up this interesting article and utilize the test in their practice.

OSCAR E. HUBBARD, M.D.

PERSONALS

ROBERT CARLSEY, Canton, was named medical representative of the Madison County Heart Council at the group's November meeting. He will also serve as a community chairman.

THOMAS GROVER CLEVELAND, Meridian, was featured as "Citizen of the Week" by the *Meridian Leader* on Dec. 1. Said the *Leader:* "Dr. Cleveland is a member of the 'old school' of doctors and has been of great service to Meridian and the surrounding area during his tenure of service here."

J. T. DAVIS, Corinth, won an honorable mention for his exhibit at the Southern Medical Association meeting held recently in St. Louis. Dr. Davis's exhibit, entitled "Nerve Injuries of the Hand," was one of approximately 60 exhibits from all sections of the United States.

JAMES S. FISACKERLY, Biloxi, has announced the opening of his offices. His practice will be limited to diseases of the eye, ear, nose, and throat. Dr. Fisackerly was retired July 31 from the USAF medical service after 26 years service. His last tour of duty was as commander of the USAF Hospital at Keesler.

ROBERT MCBROOME, Centreville, was elected chairman of the Wilkinson County Heart Council at the organizational meeting in November. C. E. Catchings, Woodville, will serve as medical advisor.

DR. H. C. RICKS, SR., Jackson, was featured as the "Pride of Northside" in the Nov. 10 issue of the *Northside Reporter,* Jackson neighborhood newspaper. Dr. Ricks is director of laboratories for the Mississippi State Board of Health.

DEATHS

FEEMSTER, LUCIEN CARL, JR., Tupelo. M.D., University of Washington School of Medicine, Seattle, 1924; interned Washington University Hospital, Seattle; Major, U. S. Army, four years; Fellow of the American College of Surgeons; member of ΑΩΑ honorary scholastic medical fraternity and Southern Surgical Congress; died Nov. 13, 1960, aged 59.

FUGITT, MABEL SMITH, Indianola. M.D., Meharry Medical College, Nashville, Tenn., 1914; founded St. Anthony's Clinic, Memphis, Tenn.; died Oct. 25, 1960, aged 71.

HOWARD, HECTOR HOLBROOK, Jackson. M.D., Memphis Hospital Medical College, Tenn., 1910; postgraduate training at Vanderbilt University, Nashville, Tenn. and Tulane University, New Orleans; died May 10, 1960, aged 86.

TRAPP, LEE HOWARD, Monticello. M.D., Tulane University School of Medicine, New Orleans, 1949; interned Charity Hospital, New Orleans; past president of the staff of the Lawrence County Hospital; member of the American Academy of General Practice and Southern Medical Association; died Nov. 8, 1960, aged 50.

MEETINGS

NATIONAL AND REGIONAL

American Medical Association, June 26-30, 1961, New York City. F. J. L. Blasingame, Executive Vice President, 535 N. Dearborn St., Chicago 10, Ill.

American Academy of General Practice, April 13-20, 1961, Miami Beach, Florida. Mr. Mac F. Cahal, Executive Director, Volker at Brookside, Kansas City 12, Mo.

American College of Surgeons, Sectional Meeting, January 16-18, 1961, Birmingham, Ala. Arthur I. Chenowith, Local Chairman, 2618 10th Ave. S., Birmingham, Ala.

Southern Society of Anesthesiologists, March 9-11, 1961, Jackson. Curtis Caine, local arrangements committee, 4332 Manhattan Road, Jackson.

STATE AND LOCAL

Mississippi State Medical Association, May 9-11, 1961, Biloxi. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson.

Mississippi Society of Internal Medicine, May 8, 1961, Biloxi. Frederick E. Tatum, Secretary, 707 Katie Ave., Hattiesburg.

Amite-Wilkinson Counties Medical Society, First Tuesday March, June, September, December. S. E. Field, Centreville, Secretary.

Central Medical Society, First Tuesday Monthly, 6:30 p.m., Robert E. Lee Hotel, Jackson. George E. Gillespie, 514-A East Woodrow Wilson Drive, Jackson, Secretary.

Claiborne County Medical Society. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Second Wednesday March and November, 2:00 p.m., Clarksdale. Robert R. McGee, 150 Yazoo Ave., Clarksdale, Secretary.

Coast Counties Medical Society, First Wednesday March, June, September, and November. Charles N. Floyd, 1412-23rd Ave., Gulfport, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday January, April, July, and October, 1:00 p.m., Hernando Motel Cafe, Hernando. L. L. Minor, Route 9, Memphis 9, Tenn., Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. A. Wayne Sullivan, 1204-21st Ave., Meridian, Secretary.

Homochitto Valley Medical Society, Fourth Tuesday Monthly, 7:30 p.m., Natchez Country Club, Natchez. W. T. Colbert, Natchez General Hospital, Natchez, Secretary.

North Central District Medical Society, Second Wednesday March and September. W. A. Middleton, 214 Summit St., Winona, Secretary.

Northeast Mississippi Medical Society, Second Tuesday March, June, September, and December, Tupelo. Eugene M. Murphey, III, 421 Main St., Tupelo, Secretary.

North Mississippi Medical Society, First Thursday January, April, and October, Oxford. R. L. Wyatt, Holly Springs, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. George B. Stewart, 139 Kirkwood St., Picayune, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. Thomas F. Puckett, 715 Arledge St., Hattiesburg, Secretary.

Tri-County Medical Society, Second Tuesday March, June, September, and December. A. V. Beacham, Magnolia, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Tom H. Mitchell, The Street Clinic, Vicksburg, Secretary.

College of Surgeons Names King President-elect, Snelling to Presidency at November Meeting

Dr. Jack V. King, Jackson, was named president-elect of the Mississippi Chapter, American College of Surgeons, during the post-Thanksgiving 1960 annual meeting as Dr. M. M. Snelling, Gulfport, assumed the presidency. Dr. G. Swink Hicks, Natchez, served as 1959-60 president, a dual gavel role running concurrently with the presidency of the Mississippi State Medical Association.



New officers of the Mississippi Chapter of the American College of Surgeons are, standing left to right, Dr. M. M. Snelling, incoming president; Dr. E. C. Hamilton, secretary-treasurer, and Dr. Jack King, president-elect. Dr. G. Swink Hicks, seated, is the outgoing president.

More than half the college's 138 active Fellows attended the Jackson meeting to hear nine essayists during the day-long scientific session. Speakers included Dr. Harwell Wilson, Memphis, professor and chairman of the department of surgery, University of Tennessee School of Medicine who presented "Personal Experience in Surgery of Tumors of the Liver." Other featured essayists were Dr. H. G. Langford, Jackson, whose subject was "Hypertension Due to Renal Artery Occlusion," and Dr. Warren N. A. Bell, Jackson, who spoke on "The Newer Chemotherapeutic Agents for Tumor Control."

A scientific highlight was a panel presentation on "Complications of Surgery" over which Dr. Curtis P. Artz, Jackson, presided as moderator. Panelists included Drs. George F. Archer, Greenville; Bedford F. Floyd, Gulfport; W. H. Parsons, Vicksburg; Leslie V. Rush, Meridian; and Harwell Wilson, Memphis.

The principal social occasion was an evening banquet with Dr. Hicks presiding. A guest panel presented a report of development of the new Pearl River Reservoir. Speakers included Mr. Eugene Thomas, chief engineer; Hon. Vaughn Watkins, chief counsel; and Dr. A. L. Gray, state health officer and a member of the reservoir commission. The evening was concluded with dancing.

Dr. E. C. Hamilton, Gulfport, was reelected secretary-treasurer for a three year term. The meeting was open to all MSMA members and scientific, business, and social sessions were held November 25 at the King Edward Hotel.

MHA Holds Workshops On Charity Regulations

The Mississippi Hospital Association held three December meetings to acquaint front office personnel with the new rules and regulations governing the hospital indigent care program.

Planned by the Council on Government Relations, the workships were held regionally at Oxford, Columbia, and Jackson.

Charles W. Flynn, MHA executive director, and Robert G. Myers, secretary, State Hospital Commission, conducted the meetings. Lester Tuck is chairman of the Council on Government Relations.

MSMA Officials Visit Congressmen

Officials of the Mississippi State Medical Association visited the offices of every member of the state's congressional delegation during the recent Washington AMA clinical session. Dr. G. Swink Hicks, MSMA president, said that ". . . a wide range of legislative topics were discussed during the meetings."



MSMA leaders confer with Representative Arthur Winstead during the recent AMA clinical session at Washington. Shown in the Mississippi headquarters room are, from the left, President G. Swink Hicks, Natchez, Mr. Winstead, and AMA Delegate J. P. Culpepper, Jr., Hattiesburg. (Photo by Bill Lively)

Conferences were held with Representatives Tom Abernethy, Arthur Winstead, and William M. Colmer as well as staff members and executive assistants of the three other representatives, Frank Smith, John Bell Williams, and Jamie Whitten. Dr. Hicks was accompanied by MSMA executive secretary Rowland B. Kennedy and assistant executive secretary Charles L. Mathews.

"The state of Mississippi should be grateful for the exercise of statesmanship by our representatives and senators," Dr. Hicks reported. "They have a solid grasp of national issues and view the legislative scene with practical reality which is paying off for Mississippi.

"We can voice only the highest praise for their understanding of medical legislative problems," President Hicks continued, "and for their willingness to study and understand complex socioeconomic issues affecting the health of all Americans."

During the AMA sessions, numbers of the congressional delegation and their staff members visited the meeting headquarters hotel to confer with MSMA officers and AMA delegates J. P. Culpepper, Jr., Hattiesburg, and John F. Lucas, Greenwood. Participating in the conferences and acting as a co-host in the Mississippi headquarters room was Dr. Raymond F. Grenfell, Jackson, who presented a scientific exhibit during the meeting.

Dr. Hicks said that neither Senator Eastland nor Senator Stennis was able to be at Washington during the meeting but that contact was made with each office.

Magnolia to Store Emergency Hospital

Magnolia will receive and store a 200-bed Civil Defense emergency hospital in the near future, according to Bob Crook, state civil defense director. The contract with the federal government was signed in early November, said Crook.

The hospital will be stored for use in the event of any major disaster. Crook said he feels the hospital is needed in Magnolia because of its geographic location near Baton Rouge and New Orleans. People from those areas would seek shelter in Magnolia and surrounding territory in case of a major disaster, he explained.

The complete unit packed will occupy 1,600 cubic feet of storage space. It includes a power generator, 200 folding beds, two operating rooms, operating equipment, drugs, and other supplies to operate a complete field hospital.

Dr. A. V. Beacham will act as medical officer in Magnolia for the unit.

Cancer Specialists Say Surgery Best Weapon

Two internationally known cancer specialists told Mississippi physicians attending the Third Cancer Seminar that surgery is still the best weapon.

Dr. Alexander Brunschwig and Dr. David A. Karnofsky, both of the Memorial Center for Cancer and Allied Diseases, New York City, delivered lectures and participated in panel discussions during the seminar. Held at the University Medical Center Dec. 1, the program was financed by the Mississippi Division, American Cancer Society.

Dr. Brunswig discussed carcinoma of the cervix

and other pelvic tumors during his lectures. "We have to see what modern surgery can do. And I mean modern surgery," he said.

Dr. Brunswig is attending surgeon and chief of the gynecological service at the Memorial Center.

Speaking on "The Current Status of Chemotherapy in Cancer Treatment," Dr. Karnofsky said four classes of drugs have been found to combat cancer with a good degree of effectiveness—after surgery and x-ray are not feasible. The classes are the nitrogen mustard group, antimetabolites, steroid hormones, and miscellaneous.

He stressed that "at this point these drugs are not curative."

Dr. Karnofsky, who is attending physician in the department of medicine at Memorial and James Ewing Hospitals in New York, also spoke on "The Treatment of Lymphomata With Illustrative Cases."

More than 60 physicians from throughout the state registered for the one-day meeting.

Mississippi panelists included Dr. Warren N. Bell, Dr. Dewitt T. Brock, Jr., Dr. Guy T. Gillespie, Dr. John T. Kitchings, and Dr. Albert L. Meena, all of the University Medical Center, and Dr. Dawson B. Conerly, Jr., Hattiesburg; Dr. George T. Martin, Vicksburg, and Dr. William L. Thornton, Meridian.

Central Society Names Sutherland President-Elect



New officers of Central Medical Society are shown with Horace Cotton, executive editor of Medical Economics, who spoke to the group's Dec. 6 meeting. Standing from left to right are Dr. C. G. Sutherland, president-elect; Dr. Thomas J. Safley, program chairman; Mr. Cotton, and Dr. George E. Gillespie, secretary. Seated from left to right are Dr. William A. Smithson, retiring president, and Dr. Clyde A. Watkins, president.

Doctor Delegates Named For White House Meet

Twenty-five Mississippi delegates will represent the state at the 1960 White House Conference on Aging at Washington, January 9-12. Named by Governor Barnett under the 1958 act of Congress authorizing the giant meeting, the group includes eight physicians.

The four day conclave will seat 2,800 delegates among whom are more than 1,700 representatives of the 50 states. Other voting seats are apportioned among national organizations having an interest in the field of aging and agencies of the federal government. The formula for state apportionment is four times the number of members in the House of Representatives.

Named by Governor Barnett as delegates are Drs. Temple Ainsworth, Jackson; L. W. Brock, McComb; Stanley A. Hill, Corinth; W. L. Jaquith, Whitfield; H. H. McClanahan, Columbus; H. C. Ricks, Sr., Jackson; and George E. Twente, Jackson. Dr. David B. Wilson, Jackson, another physician delegate, is a member of the Mississippi Council on Aging.

Other delegates include business executives, teachers, ministers, and government officials in the legislative, administrative, and welfare fields. Rowland B. Kennedy, MSMA executive secretary, is a delegate.

The conference will review reports of activities in 20 areas concerning the aging. Among these are health care and related services.

Edentulousness: A Biting Report

Got a case of edentulousness? No? But one out of every eight Americans has, according to a recent report released by the U. S. Department of Health, Education, and Welfare.

About 22 million persons constituting 13 per cent of the U. S. population are victims of the toothless tongue twister—total loss of permanent teeth. The report classified persons as edentulous where total loss had occurred whether dentures are utilized or not.

Factors exerting apparent influence on loss of teeth include age, area of residence, income, and education. Virtually no person under age 15 is edentulous, the report stated, and only one per cent in the 15 to 24 bracket were found to have

lost all permanent teeth. The proportion increases up to 22 per cent of 45 to 54 group and zooms to 67 per cent among Americans past their seventy fifth birthday.

Southerners keep their teeth at a better rate than all other Americans at a low 12.3 per cent. The northeast and west were next at 12.5 but midwesterners were found to be 14.4 per cent edentulous. Women suffer loss of permanent teeth more often than men at a seven to six ratio, the report continued.

Rural citizens experience edentulousness at a slightly higher rate than urban dwellers. Income appears to exert a pronounced influence related to purchase of dental care and diet. Families with annual incomes of $2,000 and under were 24 per cent affected while units of $7,000 and up suffered total tooth loss at a rate of only nine per cent.

Where the head of the family had less than five years of formal schooling, 19 per cent of all family members were edentulous but the rate was a modest six per cent where the household master held a college degree.

Parley on Care For Aging Held

Premeeting highlight of the December Washington AMA clinical session was the National Medical Services Conferences on Medical Care for the Aged, a project of the AMA Council on Medical Service. Chief topic of the conclave, held on the day before the session formally opened, was recently enacted national legislation on senior health care programs under extension of the old age assistance and the newly enacted medical assistance for the aging.

Representing the Mississippi State Medical Association were Drs. G. Swink Hicks, Natchez, president; J. P. Culpepper, Jr., Hattiesburg, and John F. Lucas, Greenwood, AMA delegates; Rowland B. Kennedy, Jackson, executive secretary; and Charles L. Mathews, Jackson, assistant executive secretary.

The all day conclave was devoted to orientation and explanation of Public Law 86-778, the 1960 amendments to the Social Security Act, which passed the recent Congress after defeat of H.R. 4700, the Forand bill. Speakers included both AMA and high government officials. Presiding was Dr. J. Lafe Ludwig, Los Angeles, chairman of the Council on Medical Service.

Public Health Service Urges Influenza Vaccination

Three epidemic waves of Asian influenza in the United States in the last three years have prompted the Public Health Service to urge continuing vaccination, especially of the high-risk groups: the aged, the chronically ill, and pregnant women.

According to Leroy E. Burney, surgeon general, it was found that a new antigenic variant, the Asian strain, because of its widespread introduction and the general lack of resistance to it, was the direct cause of the excess numbers of deaths, not only in the total population but most markedly among the chronically ill, the aged, and pregnant women.

The two outbreaks of influenza which swept the United States in the fall of 1957 and the winter of 1958 resulted in 60,000 more deaths than would be expected under normal conditions. There were, in addition, more than 26,000 excess deaths during the first three months of 1960 which also were considered to be the result of influenza.

An investigation by the Surgeon General's Advisory Committee on Influenza Research led the Public Health Service to recommend that these high-risk groups be routinely immunized each year:

1. Persons of all ages who suffer from chronic debilitating diseases.
2. Pregnant women.
3. All persons 65 years or older.

The surgeon general has recommended that immunization of these high-risk groups be started now and continued annually, regardless of the predicted incidence of influenza for specific years. "The unpredictability of recurrence of influenza and its continued endemic occurrence are well known," he said.

Ob-Gyn Board Schedules Exams

The Part I examinations of the American Board of Obstetrics and Gynecology will be conducted Jan. 13 in principal U. S. cities and some military installations outside the continental limits.

The board has announced that the Part II examinations, oral and clinical, are scheduled for April 8 through 15, 1961. The Part II examinations, to be held at the Edgewater Beach Hotel, Chicago, Ill., will be conducted by the entire board.

Home Fires Burning With Heavy Toll of Life

Approximately 7,300 lives are lost each year in the continental United States because of fires or burns by other means, according to the Metropolitan Life Insurance Company. Of this total, about 5,700 or nearly four fifths, occur in and about the home.

TABLE 1

DEATHS CAUSED BY FIRE AND BURNS BY OTHER MEANS

By Place of Accident
United States, 1956-58

Place of Accident	*Average Annual Number of Deaths*	*Per Cent of Total*
Total*	7,282	100.0
Home	5,721	78.6
Farm	115	1.6
Industrial place	389	5.3
Street and highway	45	.6
Public building	210	2.9
Resident institution	168	2.3
Other specified places	189	2.6
Place unspecified	445	6.1

* Includes: Accidents caused by fire and explosion of combustible materials and accidents caused by hot substances, corrosive liquids, steam, and radiation. The latter category accounts for approximately 750 deaths a year, with about 400 due to home accidents. The figures in this table do not include transport, firearm, or dynamite accidents.

Source: Reports of the National Office of Vital Statistics.

As Table 1 shows, the toll from such accidents in the home is nearly 15 times that in industrial places, including mines and quarries. Furthermore, the number of nonfatal injuries from burns sustained in the home is exceedingly large.

Data from the U. S. National Health Survey indicate that in the year ended June 1959 there were 929,000 such injuries serious enough to be medically attended or to cause at least one full day of restricted activity. As a consequence of these injuries, persons 17 years of age and over stayed away from their jobs a total of 432,000 days during the year.

The large majority of deaths from fires in the home result from accidents in which one or two people are killed. However, conflagrations causing five or more deaths are not infrequent. In the five-year period 1955-59, there were at least 154 such catastrophes in the United States, according to information compiled from various sources by the Statistical Bureau of the Metropolitan Life Insurance Company.

Young children and old people experience the highest death rates from fires and burns by other means, as may be seen in Table 2. The mortality rate among infants is higher than that for any other age group under 65 years; the rate decreases to a minimum in adolescence and then rises progressively with advance in age, slowly at first but very rapidly past age 65.

Older people, because of physical impairments or weakness, often find it difficult to escape from a burning building, and because of decreased agility they are particularly vulnerable to the hazard of having their clothing ignited by an open fire or other flame.

Pointing up the death toll at the younger ages, the National Fire Protection Association reports that in 1959 about 3,300 children under age 14 lost their lives in fires and explosions of all kinds in the United States, and estimates that nearly one third of them died because they were left alone or in the care of a baby sitter unable to cope with the situation.

It is also apparent from the table that the death rate for males is higher than that for females at every age period except 1-14 years, where the rate is somewhere greater for the girls.

TABLE 2

DEATH RATES FROM FIRE AND BURNS BY OTHER MEANS*

By Sex and Age
United States, 1956-57

Age Period (Years)	*Average Annual Death Rates Per 100,000* TOTAL	MALES	FEMALES
All ages	4.2	4.8	3.7
Under 1	7.7	7.9	7.6
1- 4	7.3	6.8	7.7
5- 9	2.8	2.2	3.5
10-14	1.3	1.2	1.4
15-19	1.1	1.3	1.0
20-24	1.7	2.1	1.3
25-34	2.2	3.0	1.4
35-44	3.0	4.0	2.0
45-54	4.0	5.2	2.7
55-64	5.1	6.6	3.7
65-74	9.2	11.0	7.7
75-84	19.4	21.9	17.4
85 and over	35.3	42.6	30.1

* Includes accidents in the house and elsewhere, except transport.

Source: Same as Table 1.

New Insurance Form Trims Paperwork

Office paperwork for Mississippi physicians will decrease in 1961, thanks to the association's new version of the Health Insurance Council uniform claim form. The one page, 12 item, condensed form has been under development for seven years by the insurance industry and medical organization. Supplies of the new form will soon be available to MSMA members at cost.

During the 1960 annual session, the Council on Medical Service observed that ". . . for years, the problem of paperwork required in preparing insurance claims has been a major concern to the medical profession and insurance companies. The problem has increased rather than decreased because more insurance covering medical, surgical, hospital, and accident care is now in force, more insurance companies have become active in underwriting this coverage, and each company inevitably developed its own claim form, resulting in a lack of uniformity and difficulty for the physician."

The new single form for both individual and group contracts has been accepted by a vast majority of the 800 American companies offering health insurance. Association spokesmen pointed out that office time saved in use of the single form will also effect a substantial monetary savings to the doctor over preparation of different forms from different companies. The HIC uniform form has been approved by AMA and MSMA.

John W. Nicholson, Jackson insurance executive and Mississippi HIC chairman, congratulated the association upon adoption of the form, stating that ". . . we who are active in the Health Insurance Council want to assure you of our desire to cooperate with you in having the insurance carriers of this state honor these standardized forms."

Mr. Nicholson emphasized that state HIC members are anxious to assist physicians in expediting claims for professional services. Use of the new form, he added, can increase the service potential of claims adjudicators.

Association spokesmen said that samples of the new form will be sent to MSMA members during January together with purchase information. It is anticipated, they stressed, that the approved MSMA-HIC form will be available at substantially lower cost per pad than those offered commercially. Plans call for production of 25 sets (original and duplicate for the physician's files) per pad.

FCC Assigns Physicians Radio Band

The Federal Communications Commission acted last month to assign radio frequencies for private use by physicians, hospitals, and ambulances, ending a long debated request for medical air channels initiated by AMA. Five new frequencies in the 152-162 megacycle band were set aside for hospitals and ambulances and eight was tabbed for doctors' use.

MSMA spokesmen said that state physicians desiring two-way radio systems between automobile and office or home may now apply for licensure. No special qualification in radio is required since all equipment will be radiotelephone or voice transmission.

Frequencies assigned hospitals and ambulances are exclusive and the eight special emergency radio service frequencies assigned physicians will be shared with Red Cross and similar organizations. Public health agencies will not be permitted to use any of the 13 frequencies, since the local government service bands are available to them.

Medicine's initial application to FCC was for frequency assignments in the 40 megacycle band. The final decision is officially designated Second Report and Order, Docket No. 13273, Federal Communications Commission, October 20, 1960.



"Last night I broke two arms, two legs, and one commandment."

Public Health Workers Note State, National Issues

Mississippi public health workers considered state problems such as the coroner system and national issues including federal medical care programs during their 24th annual meeting.

Held in Jackson Dec. 7-9, the convention was planned on the theme "Maximum Health and Good Living." A number of lectures and eight section meetings composed the program.

Speaking to the Dec. 8 general session, Dr. A. L. Gray, state health officer, said any Mississippi participation in the federal-state medical care program for the aged "should be a part of the general official public health program."

Said Gray, "I am not proposing that Mississippi does or does not participate in the medical care program. . . . I am saying that if and when the state of Mississippi launches into a medical care program of this type, we have dispersed throughout the state about 750 medically oriented people in official public health who by their participation could assure a much greater degree of success with desirable conservatism than could be developed in many years by an agency or department which is not statewide in scope or medically oriented."

During the same session, Dr. Hugh R. Leavell, professor of public health practice of the Harvard School of Public Health, delivered the Memorial Address honoring the late Dr. Felix J. Underwood. Dr. Underwood was state health officer for many years before his death in 1958.

In later Thursday activity, Dr. Ruth Hagstrom, director of the Clay and Oktibbeha County Health departments, advocated a medical examiner system to replace coroners in Mississippi. Speaking for the Vital Statistics Section, Dr. Hagstrom branded the layman-elected coroner system "inadequate and archaic."

"An adequate medical examiner system would be the best answer in obtaining accurate and complete death certificates," she said. "And this knowledge is important in our efforts to prevent disease and death."

According to Margaret E. Rice, head of the Vital Statistics Bureau in the State Board of Health, 2,485 deaths or 12 per cent of the 1959 total were turned in with cause of death unknown.

Dr. Hagstrom did not elaborate on how the state system should be set up. "Other states' systems would have to be studied and the most effective for Mississippi may be parts of several different states efforts," she explained. "My main contention is that the coroners system is inadequate and we need more accurate death certificates than we are getting now," she said.

During the closing session of the three day meeting, Howard E. Boone, special program representative for the State Board of Health, was made president-elect of the Mississippi Public Health Association. Miss Grace Huffman of Summit was installed as new MPHA president succeeding Z. E. Oswalt of Jackson.

Among its last actions, the MPHA proposed four enactments for the consideration of the next legislative session. Charging that Mississippi is one of the few states with "most ineffective regulatory laws and capabilities" regarding food and drugs, the group asked the state's lawmarkers to: 1. Reduce the processing and marketing of poor quality and otherwise unsafe food and drugs. 2. Provide for proper labeling of necessary and universally used items. 3. Control the use of unnecessary additives and adulterants in both food and drugs. 4. Repeal or amend such laws as are now in existence in relation to food and drugs, substituting therefor a model food and drug law or laws which would provide the State Board of Health with the necessary authorities, direction and funds to develop essential regulatory and control activities.

Nursing Home Center Building in 1961

The nation's insurance and pharmaceutical industries are combining forces to finance construction and staffing of Washington's newest addition to its galaxy of famed buildings. This will be the International Nursing Home, Research, Educational, and Service Center, an $11 million project to be started this year.

The center will be a base of operations for nursing home administrators with a training school, one of the world's largest scientific libraries on care of the aging and chronically ill, a completely equipped model nursing home in full operation, a permanent display of nursing home equipment, and extensive research facilities.

Spokesmen for the sponsoring industries said that present nursing home facilities provide approximately 450,000 beds in 14,000 homes and about 10,000 bed-and-board establishments. With an estimated 20 million Americans in the over 65 age bracket by 1975, one million new nursing home beds will be required to provide the optimum of one bed per four aged persons.

The entire cost of the $11 million project will come from private sources with neither federal nor state governmental participation.

10,000 Attend ASC Clinical Congress

JAMES C. GRIFFIN, JR., M.D.
Jackson, Mississippi

Research reports, lectures, panel discussions, postgraduate courses, films on surgical technique, and operative telecasts composed the program of the American College of Surgeons' 46th Clinical Congress.

Approximately 10,000 persons, including 7,000 practicing surgeons, attended the October Congress which was held in San Francisco. More than 1,000 physicians took part in the program.

During the meeting, Dr. I. S. Ravdin of Philadelphia, chairman of the Board of Regents and vice president for medical affairs of the University of Pennsylvania, was installed as the new president of the college. The membership was raised to approximately 24,000 with the initiation of 1,170 surgeons as Fellows of the American College of Surgeons.

One of the highlights of the meeting was a talk by Dr. Paul R. Hawley, director of the American College of Surgeons, to the National Association of Science Writers. Dr. Hawley discussed the sliding scale of fees for surgeons, which he maintained was practical and valid. He felt that the most valid reason for variable fees is that the poor, as well as the better-off, must have surgical care when they need it. Yet, he said, if the level is placed low enough for everyone to afford it, surgeons would find it difficult to make a reasonable living.

Dr. Hawley noted that the ACS Board of Regents has defined a reasonable fee as that which is commensurate both with the service rendered and with the reasonable ability of the patient to pay. He said that no family should have to forego any necessity in order to pay a surgical fee. By the same token, he continued, persons should include surgical care in their budgets.

Dr. Hawley encouraged a frank discussion with the patient prior to the presentation of a bill and said satisfactory agreements usually could be worked out this way. He said that the discussion should include the hospital bill and other charges which the patient has to meet and that the patient should be shown that these costs have risen at a substantially higher rate than surgeons' fees. He stressed the importance of educating the people to the necessary cost of medical care and that people must recognize that medical care is as essential as food, rent, and clothing and budget accordingly.

Among the biggest attractions of the meeting were the 14 live telecasts of operations. The surgical procedures ranged from a radical mastectomy and pulmonary resection to cholecystectomy and open reduction of fractures. It was noted by surgeons from this area that once the skin incision had been made, the cautery was used throughout the procedure to divide muscles and fascia and for hemostasis regardless of whether it was correction of undescended testicle or radical mastectomy or pulmonary resection.

The forum on fundamental surgical problems is one of the most important events of each congress. At the 1960 meeting, 257 reports of research in progress throughout the country were presented. Heretofore, the papers had been collected following the forum and were bound and sold as a volume several months later. However, this year the papers had been collected and bound prior to the congress and were on sale at the beginning on the meeting.

The advocates of hemigastrectomy and vagotomy for duodenal ulcer continued to present studies indicating that this procedure may replace others as a choice of therapy for duodenal ulcer. Dr. William Scott of Nashville presented a series of 739 patients that had been followed for 13 years. The series showed an extremely low ulcer recurrence rate of .5 per cent and indicates that the procedure carries a lower operative mortality than the 75 per cent subtotal gastrectomy.

The 47th Clinical Congress is scheduled for Oct. 2-6 in Chicago.

AUXILIARY

Jones County Names Officers

Mrs. Charles Guice will serve as president of the Jones County Medical Auxiliary during 1961. She succeeds Mrs. Frank L. Ramsey who was named vice president at the group's November meeting.

Other officers elected were Mrs. Eugene Busch, president-elect; Mrs. David W. McLean, secretary, and Mrs. James Waites, treasurer. All are from Laurel.

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ORIGINAL PAPERS

Intra-arterial Transfusion in the Treatment of Hemorrhagic Shock

J. HURD GADDY, M.D. and DONALD DIEFENDORF, M.D.
Gulfport, Mississippi
Baton Rouge, Louisiana

Because of its simplicity, intravenous transfusion has become a universally acceptable method of restoring blood volume and raising blood pressure. This method replaces blood volume primarily and brings about a rise in blood pressure secondarily. Because of the time lapse between the initiation of intravenous transfusion and the elevation of blood pressure, intra-arterial transfusion is often a wiser choice of treatment. Through its use, blood volume is replaced and blood pressure elevated simultaneously. The authors discuss the technique of intra-arterial transfusion and report clinical results in 24 cases.

THE PURPOSE OF THIS PAPER is not to present additional evidence to support or disprove any concepts about the method by which intra-arterial transfusion brings about a rise in blood pressure. The results obtained by the use of intra-arterial transfusion are presented and the technique of administering intra-arterial transfusion is explained.

The basis upon which intra-arterial transfusion is given is that blood given into an artery rapidly brings about a rise in blood pressure by raising the intra-aortic pressure, increasing coronary artery blood flow, and providing a sufficient volume of blood against the pumping action of the heart to insure perfusion of vital organs, thereby reversing the entire shock state.

Restoration of blood volume and elevation of blood pressure is a fundamental surgical procedure. The rapidity with which this is accomplished determines in large part the immediate outcome and prognosis, particularly as pertains to cerebral and renal function and prevention of myocardial ischemia. The simplicity of intravenous transfusion has made this a universally acceptable method. This method replaces blood volume primarily and brings about a rise in blood pressure secondarily. The time interval between the initiation of intravenous transfusion and the elevation of blood pressure is considerable in many cases. However, in the use of intra-arterial transfusion the replacement of blood volume and elevation of blood pressure is accomplished simultaneously and rapidly.

There is no hesitancy to initiate surgery in these cases of severe shock, regardless of the blood pressure level. We have found that a surgical team working rapidly, often with little or no anesthesia in these practically moribund patients, can expose the large intra-abdominal and pelvic vessels, arrest the hemorrhagic process, and initiate intra-arterial

Read before the Section on Obstetrics and Gynecology, 92nd Annual Session, Mississippi State Medical Association, Jackson, May 10-12, 1960.

transfusion more rapidly than another team can expose and cannulate a collapsed peripheral vessel. Nor do we close the abdomen while these patients are still in shock, for it is advisable to keep these large vessels available and to have the added assurance that the failure to respond is not due to hemorrhage at the operative site.

TABLE I

ETIOLOGY OF SHOCK

Hem. at Surg.	5
Rupt. Uterus	4
P.O. Hem.	3
Incompat. Trans.	3
Rupt. Tubal Preg.	2
Rupt. T.O.A.	2
Abruptio Placenta	2
Amniotic Fluid Emb.	1
Rupt. Renal Art.	1
Terminal Ovarian Ca.	1
Total	24

The technique of intra-arterial transfusion is simple and requires only the equipment which is available in the operating room. A simple transfusion set with a 15 or 18 gauge needle is used. This set may or may not be sterile; however, sterile technique is not of prime importance at this time. The usual plastic pumping set does not provide sufficient pressure; therefore the pressure in the system is provided by a sphygmomanometer bulb attached to the blood bottle air vent by means of a glass adapter. The needle is bent at a 45 degree angle to facilitate insertion and to prevent the inadvertent puncture of the posterior wall of the vessel. The needle is inserted in a cephalad direction. The blood pump must be manned by a responsible person since no air must be allowed to enter the vessel.

After removal of the needle, simple pressure and occasionally a silk suture at the puncture site is all that is necessary to control the bleeding. The hypogastric artery is preferred as this artery may be ligated with impunity. As is the case in many instances, ligation of the hypogastric artery is a necessary and advisable step in the control of hemorrhage deep in the pelvis. In those cases where the external iliac artery was utilized, spasm and distal ischemia is prevented by perfusion of the vessel with procaine. In the immediate postoperative period, lumbar paravertebral sympathetic blocks are done.

TABLE II

DURATION OF TRANSFUSION

I.V. Prior to		*I.A.*	
30 min.	2	5 min. or less	17
30-60 min.	11	6-10 min.	6
60-120 min.	9	10-15 min.	1
120 min.	2		

These cases are taken from the Tulane Obstetrical and Gynecological Department at Charity Hospital in New Orleans. It will be noted that the etiology of shock in these 24 cases encompasses the various causes of shock encountered in obstetrical and gynecological surgery. Our service was not responsible for the early care in all of these cases, as Charity Hospital receives many patients from the smaller outlying hospitals. Some of these patients were admitted to the service with no obtainable blood pressure, with and without previous treatment for shock.

Table II is presented to show that these are not ordinary cases of shock and would not respond to the usual shock measures. It will be noted that 22 of the 24 cases had received intravenous transfusion for a period greater than 30 minutes, whereas the blood given intra-arterially was given in less than five minutes in 17 cases and in less than 10 minutes in an additional six cases.

TABLE III

AMOUNT OF BLOOD GIVEN

CC.	*I.V. Prior To I.A.*	*I.A.*
500	2	7
500	3	9
700-800	0	4
1000	8	3
1500	4	1
2000	1	0
2000-3000	3	0
3000-4000	2	0
5000	1	0

Table III is presented to show the large volume of blood which had been given intravenously as compared to the small volume of blood which was given intra-arterially. It will be noted that 20 of the 24 cases received less than 800 cc. of blood intra-arterially.

Table IV is presented to show that those cases

were in profound shock and in 19 of the 24 cases no blood pressure was obtainable. Immediately following intra-arterial transfusion, 21 of the 24 cases had a blood pressure of 90/60 or above. The important point is that many of these cases had received and were rapidly receiving blood intravenously and 19 of the 24 had no obtainable blood pressure. However, immediately following intra-arterial transfusion which was given over a short period of time, 21 of the 24 cases had blood pressure of 90/60 or above. It was then possible to replace the estimated blood loss intravenously (often over a period of several hours) as the pump had been primed so to speak, and their cardiovascular system was now capable of handling this blood.

There were only three cases which failed to respond. One was a case of amniotic fluid embolus and a cardiac arrest prior to the initiation of intra-arterial transfusion. This patient had cardiac massage and intra-arterial transfusion, but failed to respond. Although, experimentally intra-arterial transfusion alone has caused the heart to start to contract after a period of asystole.

TABLE IV

B.P. AT TIME OF I.A.T.

70/40	1
50/0	1
40/0	3
0/0	19

The case of intra-abdominal bleeding following vaginal hysterectomy had intra-arterial transfusion, and shortly afterward she developed cardiac arrest. Her blood pressure was unobtainable at the time the intra-arterial transfusion was started and although the heart did contract for a short period following the massage, the blood pressure was never obtainable and the patient expired a few minutes later. It was felt that treatment was started too late in this case.

One of the three patients who was in shock from prior incompatible blood intravenously failed to respond immediately. Ten minutes after completion of the intra-arterial transfusion the blood pressure was heard at a 100/90 for a few moments. She died ten hours later.

There were nine deaths in the series. That is to say none of these patients left the hospital alive. It must be remembered, however, that in only three cases did we fail to do what we set out to do with intra-arterial transfusion, that is to raise the blood pressure above shock levels.

The only complication which has occurred which could be attributed to intra-arterial transfusion was in one of the cases of far advanced ovarian carcinoma. This patient went into shock while having the large primary tumor mass removed and due to dense adhesions deep in the pelvis, the external iliac artery was used. Postoperatively the patient developed spasm and ischemia and gangrene of the leg on that side. Surgery was consulted for possible replacement of this segment of the vessel, however due to the extensive metastatic disease known to exist and the fact that death was imminent, this procedure was not performed. The patient died five days postoperatively of pulmonary embolus. The ischemia and gangrene proved at autopsy to be due to the dislodgement of an atheromatous plaque at the needle puncture site.

TABLE V

B.P. IMMEDIATELY AFTER I.A.T.

90/60 or above	21
0/0—Amniot. Fluid Emb. With Cardiac Arrest Prior to I.A.T.	
0/0—P.O. Vag. Hyst. Bleeding Cardiac Arrest Immediately After I.A.T.	
0/0—Incompat. Blood Trans.	

I would like to mention two other cases in which I have used intra-arterial transfusion and which are not included in this series. Both cases were comatose and had no obtainable blood pressure. Without the aid of anesthesia and without sterile surgical technique the abdomen was opened, the hemorrhagic process was arrested, intra-arterial transfusion initiated. The patients' blood pressure rose over the next three or four minutes to that of 90/60 or above. The patients' estimated blood loss was then replaced intravenously. Postoperatively one of the patients developed a wound abscess, otherwise their postoperative course was uneventful. ★★★

TABLE VI

DEATHS

Incompat. Trans.	3
Amniot. Fluid Emb.	1
P.O. Vag. Hyst.	1
Massive Rectal Hem.	1
Post Mortem C/S	1
Terminal Ovarian Ca.	2

Gulf Aire Apartments (Dr. Gaddy)

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CLINICAL CROSSTALK

Most research reports on clinical testing of new drugs are pointed and useful but snooty scientific balderdash does crop up now and then. The U. S. Armed Forces Medical Journal took the latter for a good natured skinning, by "translating" selected passages from recent evaluation reports.

"We determined to conduct a controlled comparative evaluation of the most commonly used agents in order to assay their respective advantages and disadvantages."

Translation: What else could we do with these samples?

"Exhaustive perusal of the available literature revealed the paucity of experimentation in this area."

Translation: Nothing in this week's JAMA.

"Subjects were randomly selected without prior attention to inherent clinical variables."

Translation: We used anybody we could get.

"The precise mechanism through which the response is mediated has not yet been defined."

Translation: We don't know what happened.

"We gratefully acknowledge the cooperation, in many areas of this study, of the Blank Laboratories."

Translation: They paid us.

The General Practitioner of 1970

LESTER D. BIBLER, M.D.

Indianapolis, Indiana

The author discusses the evolution of the general practitioner and the birth of the American Academy of General Practice. He predicts what the place of the GP will be in the coming decade, and concludes, "If I had it all to do over again, I would still be a GP."

JOHN GALSWORTHY SAID, "If you do not think about the future, you cannot have one."

There has been an unbelievable and miraculous evolution of the general practitioner since 1945. In 1944 I had the privilege of hearing indoctrination lectures in Philadelphia where a group of doctors were told to organize their respective groups or someone would organize for them. At the 1946 AMA Convention in San Francisco, a committee was appointed. Among the members were Drs. Wingate Johnson, Paul Davis, Stanley Truman, and Holland Jackson. This culminated in that memorable meeting in 1947 in the Claridge Hotel in Atlantic City where 247 GP's started the Academy. That was the birth of the American Academy of General Practice.

THE ACADEMY'S AIMS

Since that time we have improved in stature by scientific study as well as numerical strength to over 26,000 doctors of general practice, the second largest medical group in the United States. This group is identified with the promise of:

1. Providing the best medical and surgical care possible to their patients.

2. A continuing course of postgraduate study by members to keep themselves abreast of modern therapeutics and techniques in order to provide the best family care to their patients.

In the interim of 13 years, we have seen the GP come forward in positive and constructive force to participate as a unit in local medical societies, hospital staffs, county, state, and national medical organizations. Today, over 40 delegates to the AMA are members of the Academy of General Practice.

The general practitioner is doing well economically. No longer is he paid with a razor back pig, a sack of potatoes, a chicken, or a piece of side meat. The modern GP has a nice home with all modern conveniences, transportation, and hospital privileges. His income is only limited by his desire to work and provide good care to his patients. Income averages listed by various economists show the GP is a good member of the medical team.

What of the future medical school training, both undergraduate and graduate? Through the constant efforts of our staff organizations, education committees, and members, with the cooperation of many of the deans of our medical schools, the curriculum is gradually being changed. The deadwood is being cleared and a more modern concept of medical education is being presented to our future doctors of medicine.

More courses will be presented to treat the patient as a human, and the family as a unit and to recognize many of our psychosomatic and emotional problems.

GP SHORTAGE

Here is what Norman H. Davis, director of the medical program of the Sears-Roebuck Foundation says: "Regarding the future GP, I feel if the needs of this country are to be met, our schools must encourage—not discourage GP's. The shortage of doctors for general medicine is very critical. It really is tragic that so many enter into specialized fields, particularly in pediatrics, ob-gyn, and internal medicine.

Read before the 12th Annual Scientific Assembly, Mississippi Academy of General Practice, Jackson, September 28 and 29, 1960.

"Medicine and the public in general would benefit if young doctors spent three to five years as GP's before deciding on specialization. This would enable the doctor to know the problems of dealing with patients, and at the same time, provide an income to defray specialized training expenses. This may be in the future by 1970."

FAMILY EXPERIENCE

One way medical students can secure good family experience is thru preceptorship training, general practice clinics, and family care plans. Different schools, different areas and environments will vary the manner in which the students secure this experience. The University of Tennessee, Arkansas, Kansas, Pennsylvania, Wisconsin, Mississippi, and many others have such programs. After graduation the new doctors of medicine will take a two or three year residency.

Internships are passé and are tolerated only by precedent or by state laws which require an internship before granting a license. Pennsylvania requires a rotating internship to practice while Johns Hopkins, which is nearby, provides straight internships, that is internship in x-ray, surgery, medicine, and other specialties. Consequently, many Johns Hopkins graduates are denied practice in Pennsylvania.

RECOGNITION OF TRAINING

Postgraduate education and training must be recognized and approved. This may be through the Academy by certificates of merit or by a cooperative Board of General Practice or similar organization. If we do not recognize and reward additional education and training for general practice, these young doctors naturally will take an extra year and limit their field of practice before they are adequately prepared to do so. At the present time the AAGP offers no recognition for advanced training. This is one reason there is such an urgent need for good family doctors to act as the family physician, counselor, and advisor.

Solo practice is declining rapidly. The public is asking for continuous medical coverage and the demands on the modern family doctor are such that he cannot be on call 24 hours a day. Many now work 60 to 80 hours a week and think nothing of it. With unions recommending a 32 hour week, the medical profession will need either more doctors or less patients, or a supermarket type of medical and surgical care.

Rural communities will have a medical center similar to that recommended by the Sears and Roebuck Foundation. Here two or more doctors will operate a first class, modern, labor saving, and space saving health unit. This unit will be equipped to care for medical, obstetrical, and surgical emergencies, x-rays, treatment of fractures, and at least temporary bed care.

The doctors in urban areas will have an associate or partner so that their practice is covered at all times and both the patient and the physician will feel secure. The patient will not panic because the doctor is out of town and the doctor can relax because he knows his patients are provided with good medical care. There is a two year residency program starting now which will stimulate further postgraduate training.

AMA PILOT STUDY

A pilot study has been approved by the AMA Council on Education and Hospitals and, in large measure, seems to meet specifications of the American Academy of General Practice. As outlined by the secretary of Residency Review Committee for General Practice, Dr. John C. Nunemaker, these key features of the intern-residency project are to be tested at the Baltimore City Hospital, the University of Kansas Medical Center, and the Indiana University Medical Center.

Heavy emphasis will be placed on outpatient service, including follow-up in the home, handling specialist referral, and social and rehabilitation services. Training in psychosomatic and emotional aspects of illness will be presented.

An integrated progressive program calling for work in internal medicine, pediatrics, and emergency room procedures, plus electives expected to consist of ob-gyn, radiology, and anesthesiology. Surgery will be confined to minor operations and emergency cases in this program.

TWO YEAR PROGRAM

The delegates of both the AMA and AAGP approved reports urging a two year program as the minimum requirement prior to family practice and agreeing on most facets of the training. Exceptions raised by AAGP were that ob-gyn should be required, and that surgery should have more emphasis. In the future the academy plans to limit membership of new members to those meeting these requirements.

One point all doctors must be on guard against is that of retiring our elders by calendar year status. Many hospital surveys are now recommending that all doctors past 65 have their hospital case

records perused and checked and that physicians 70 and over should have a younger man sponsor or check their treatment and medical decisions. This may sound ridiculous but it has already been tried in one hospital in Indiana and was promptly defeated.

The 1970 general practitioner will be more alert with finer appointments and accommodations, well trained, and will do an outstanding job in providing the best medical and surgical care to his patients.

FIGHT FOR IDENTITY

However, the GP of 1970 will have to fight to maintain his identity as an individual. The present renewed assault to attempt a back door approach of socialized medicine is an ever present danger. It has been tried for the past 50 years.

The recent fiasco in Congress shows that the labor unions and the "do-gooders" are still trying to put across some type of Forand Bill legislation and the new doctors must be made aware of this danger. Do you know that the Student AMA House of Delegates Meeting in Los Angeles, Calif. refused to pass a resolution opposing the Forand Bill? There is urgent need to alert our young doctors and our future doctors that a desire for so-called "security" from the "great white father" is not the type of heritage that America was built on and if we accept such token of government supervision, then we are on the downward path of a decadent nation.

DISUNITY: A SERIOUS DANGER

Dr. Louis H. Bauer, who has served as both AMA president and chairman of the Board of Trustees and is now secretary general of the World Medical Association, states that a study of the situation in all countries shows that wherever there has been any halting of further intrusion by government, it has been because the medical profession stood as a unit under the leadership of a strong organization. Disunity is a serious danger to the profession in this country. If the doctors in the United States do not wake up and close ranks, medicine is all through as an independent profession.

What can be done? There are several things: 1. Revive interest in and activity of local and national medical societies. Make membership a badge of respectability, not a routine matter. Arouse the interest and urge participation of young doctors. 2. Develop "teeth" in grievance committees. Suspend or expel the few fee-chiselers and fee-gougers who are debauching and disgracing the profession. 3. Stop looking backwards and wishing for the "good old days." Prepayment is here to stay, whether we like it or not. Guide it in the right direction. Face the fact that medical care has become expensive. Make every effort to deliver the highest quality medicine to all, at a price they can afford to pay. Prevent abuses of prepayment and insurance systems. 4. Inculcate the new physician in the traditional philosophy that medicine is a humanitarian profession, not a commercial trade. 5. Remember, when government takes over medicine, it takes (and controls) all, not a part.

Danger signals are flying. Are we going to heed them or will we sit back smug, and complacent and utter those famous last words, "It cannot happen here."

NEED FOR EXPERIMENTATION

Dr. F. J. L. Blasingame, executive vice president of the AMA, states that in the field of medical education there is a vibrant spirit of change, experimentation, and expansion. Working in a healthy climate of ferment and unrest, medical schools are examining the quality and content of their educational program. They are seeking the best possible ways of presenting a coordinated body of medical knowledge which will prepare the physician for practice in the changing scene of modern medicine. The entire profession must encourage and assist all sound experimentation aimed at the goal.

Related to this is the need for better understanding and liaison with labor, business, industry, consumer groups, and other third parties involved in the provision and financing of medical services. We must prove to these parties that it is to their advantage to preserve the principle of freedom of choice of physician and the right of the medical profession to judge the qualifications and competence of physicians and hospitals. We must develop effective systems of disciplining unethical physicians and restraining those whose actions are damaging to the entire medical profession.

THE GREATEST CHALLENGE

Dr. J. S. DeTar, past president of the American Academy of General Practice, said it is in this field, the field of physician-patient relationship, that the greatest challenge facing the profession lies. With the continued trend toward more and more specialization, this problem will continue to rank first. Will this challenge be met? If so, how? It will be met by training of more family physicians—physicians who will assume the responsibility for the

continuing care of the patient and his family, who will call consultation when indicated but who will *continue* to exercise a guiding hand over the patient's medical and economic welfare.

This physician will be a generalist with thorough grounding in internal medicine. His undergraduate training will accent the patient as a person. His graduate work will be comprehensive, first two, then three years. His preparation in medicine, pediatrics, geriatrics, preventive medicine, rehabilitation, psychiatry, and trauma will be far more comprehensive than it is now. His obstetrics and surgical practice will depend on his training.

The production of such family physicians, in numbers adequate to meet the need, depends upon the medical school facilities and the staff members of the hospitals offering graduate training. They must recognize the urgency of the problem. Present indications that this challenge will be met are most encouraging. One must particularly cite the work of the American Medical Association, the Association of American Medical Colleges, and the American Academy of General Practice.

In conclusion I believe that general practice is here to stay. There will always be a need for the family doctor as long as people become ill and women have babies.

The GP will be better trained and prepared for family practice. He will have modern equipment and facilities to practice modern up-to-date medicine. In rural areas particularly, he must have additional surgical training. He will have more time for leisure to be with his family due to group or associate practice with other doctors. His hospital privileges will be guarded jealously as he will be required to continue his education and participate in teaching and staff activities. He will be an asset to the medical team.

This I can honestly say: I have enjoyed being a general practitioner and if I could, I would do it over again. ★★★

445 North Pennsylvania Street

OLD EVIL: NEW ROOT

Three-quarters of all drug addicts, according to recent studies, became addicted in the course of medical treatment. Reason for the intensified studies is that many of the new drugs being introduced on the market have addicting properties which are recognized too late. In 1936, 90 per cent of all drug addicts used morphine, but today 73 per cent are addicted to the new synthetic drugs. Almost anyone can become addicted to drugs, according to Dr. Maurice Partridge, consultant psychiatrist at London's St. George's Hospital. But Dr. Partridge has found that persons of an "obsessional personality with tendencies towards excessive neatness, undue caution and conscientiousness" are less prone. Factors which are conducive to addiction are lack of caution, impulsiveness, and emotionalism.

Gallbladder Surgery in the Aged

JOHN S. BARR, M.D.
Belzoni, Mississippi

It was once held that elderly gallbladder patients should be medically managed rather than surgically treated. Modern methods and increased longevity of life have made surgery the first choice even in the aged.

The author considers technique and treatment along with justifications for surgery and necessary precautions. A case report is presented.

DURING THE PAST three years, the staff of the Belzoni Clinic has performed gallbladder surgery on a significant number of persons over 65.

These patients were afflicted with sundry concomitant diseases which made a large majority of them poor surgical risks.

Of course, just being 65 or over does not make a patient a poor risk. Most persons who have survived six and a half decades have a philosophic approach to life; they tend to be optimistic, extroverted, and cooperative. Their greatest evil is overindulgence in food—though many are free from obesity when they come to surgery because of the dietary restrictions forced upon them by a chronically diseased gallbladder.

A TYPICAL CASE

Mrs. W. R. C., age 82, was seen first in her home with acute right upper quadrant pain radiating to the angle of the scapula. Severe nausea and vomiting accompanied this pain. Further study in the hospital confirmed the clinical diagnosis of acute cholecystitis with cholelithiasis.

This patient had a third degree A-V block due to arteriosclerotic heart disease. She had been decompensated, but was moderately well controlled with digitalis and oral diuretics, though mild ankle and foot edema occurred each afternoon.

Since medical and supportive measures failed to give relief, it was elected to do gallbladder surgery.

At operation, done under ether-oxygen, a thick walled gallbladder, three times normal size, was found. Time was taken for a meticulous dissection of the cystic duct and cystic artery. Failure to do this in order to get the patient off the table as soon as possible usually results in grief soon after the operation. The liver was scarred, grossly resembling an early cirrhosis. The common duct was slightly enlarged, though there was no palpable induration. The temptation to explore this duct was strong, but in the absence of a history of clinical jaundice, it was resisted.

Postoperatively, the patient remained comatose for four days. This was due to a combination of factors, but hepatic insufficiency was the principal cause. The blood urea nitrogen was elevated some, but urinary output remained adequate. Carefully controlled fluid therapy as indicated by clinical status and laboratory procedures was the mainstay of treatment. On the fourth day, the patient became responsive and began to take nourishment. Thereafter, her course was quite smooth. In the ensuing months following her cholecystectomy, her cardiac status has steadily improved.

JUSTIFICATIONS

It was once thought that "make-do" medical management should be used in lieu of surgery in elderly gallbladder patients. This is not the case. They are primary surgical problems; there is seldom justification for medical management. They should be operated upon as soon as the diagnosis has been made and the physiologic and pathophysiologic status has been determined. To procrastinate is to invite disaster.

Read before the 74th Semi-annual Meeting, Delta Medical Society, Belzoni, October 12, 1960.

The discussion of technique will not be detailed, as it is well known and well documented. But some points should be mentioned.

First, the anesthesia. Carefully planned preoperative sedation, followed by slow induction with 0.1 per cent sodium pentothal, which in turn is followed by ether-oxygen, is the safest anesthesia.

Exposure is obtained through a subcostal (Kocher) incision. Other incisions are equally as good.

Every effort should be made to remove—rather than drain—the gallbladder. A well-organized team can remove the diseased organ with not much greater expenditure of time than is required to drain it.

The common duct should be explored only if absolutely necessary (as determined by history, operative findings, and operative cholangiography). A T tube is sometimes necessary, but it is a foreign body, and its prolonged presence will often have a morale lowering effect in the aged patient.

Of course, it is useless to operate upon a moribund patient. If myocardial decompensation is severe, if arteriolar nephrosclerosis has caused azotemia or if any concurrent killing disease process is present, then surgery obviously should not be done. In such situations a cholecystostomy under local anesthesia may offer relief.

PRECAUTIONS

Precautions include: (1) meticulous clinical observation, (2) daily measurement of intake and output of all fluids, (3) daily electrocardiograms, (4) daily determination of body weight, and (5) daily determinations of plasma electrolytes. The plasma electrolyte concentrations determine the type and amount of fluids to be administered parenterally each day. Plasma chlorides (normal 96 to 100 mEq per liter) and carbon dioxide (normal 25 to 35 mEq per liter) concentrations should show a sum of 127 mEq per liter. The serum sodium and potassium concentrations help to furnish an indication of acid-base balance as well as a key to fluid metabolism. A daily hematocrit furnishes valuable information.

Until the patient is ambulating freely and daily or oftener taking nourishment by mouth, determinations of serum sodium, potassium, chloride, and carbondioxide are mandatory for the intelligent management of the aged post-cholecystectomy patient.

While these procedures provide but crude indices of patient progress, they do represent some steps in the right direction. Perhaps in the future, the complex processes of damage and repair will be more accurately understood.

During the immediate postoperative period and for three to five days thereafter, continuous gastric suction should be employed. Fluids by mouth should be limited because as the fluid returns through the tube, it brings with it electrolytes which must be carefully replaced.

SOLUTIONS OF CHOICE

If the sum of the carbon dioxide and chlorides is less than 125 mEq per liter, hypo-osmolarity exists. In the average adult, 1,000 milliliters of 3 per cent sodium chloride solution will usually suffice to produce iso-osmolarity. If hyper-osmolarity (carbon dioxide and chlorides greater than 130 mEq per liter) exists, then 5 per cent glucose in water is the fluid of choice.

In hypokalemia, add 80 mEq potassium chloride for maintenance and another 80 (within a 24 hour period) for correction of the deficit. If this is given in one infusion, it should not be given at more than 60 drops per minute. In those patients with renal insufficiency, potassium must be given with great caution.

Acidosis (lowered blood bicarbonate, i.e. carbon dioxide concentration less than 25 mEq per liter) is corrected by infusion of 6/M sodium lactate or 6/M sodium bicarbonate. Alkalosis (carbon dioxide concentration greater than 29 mEq per liter) is corrected by infusion of 2 per cent ammonium chloride solution.

In hyponatremia, a hypertonic sodium chloride solution should be used. It must be remembered that normal saline solutions are good maintenance therapy, but will not suffice to treat a sodium deficit. The above mentioned fluid and electrolyte therapy is contingent upon adequate urinary excretion.

Some of the above solutions are not available commercially. They are, however, easy to prepare and sterilize in most hospitals.

CRITERIA OF SUCCESS

Euripides, one of the great Greek tragedians, wrote, "When death comes near, the old find that age is no longer burdensome." This idea expresses the attitude of most old people toward necessary surgery. Physicians must accept the challenge of helping the elderly live out their lives in as much comfort and freedom as possible. If this assistance entails the removal of a diseased gallbladder, then this must be done, utilizing the above precepts. ★★★

84 Church Street

Expanding Opportunity for Service In Public Health

A. L. GRAY, M.D.
Jackson, Mississippi

The author, who is executive officer of the Mississippi State Board of Health, discusses the facets of public health which will probably be most important in the coming decade. He considers radiological health, civil defense, and medical care of the indigent among other items. The paper is concluded with a short discussion of dental health and accident prevention.

I CONSIDER THIS annual meeting of the Mississippi Public Health Association an event of much importance, giving opportunity for all of us to consider together the vital and essential program of health protection and to gain new knowledge based on continuing experience in this state, other states in the nation, and in all nations in the world. Also, the pleasant and motivating privilege of maintaining the kind of warm friendship and understanding between co-workers which brings about mutual cooperation is of great value.

This public health program in our state continues to be recognized among the top statewide programs of the nation for some very good reasons. Chief among these reasons is the genuine spirit of cooperation and mutual support of all those who labor in this vital field, including you as members of the official health force with the indispensible support of private physicians, dentists, hospital authorities, the nursing profession, other state departments, the executive and legislative branches of state government, and county and city officials.

NEW OPPORTUNITIES

Among all these groups there is an obvious determination that Mississippians shall have the best possible state of health which is so fundamental in general progress. But, we cannot maintain an acceptable program in a rapidly changing society by standing still. We are challenged daily with new problems and new and expanding opportunities to apply our skills and knowledge.

May I discuss briefly a few of these new or expanding opportunities which we must translate into responsibility required to keep our total program vigorous and effective in the 1960's.

HOUSING PROGRAM

First, I must point out a revitalized public health facility construction program which I interpret as a tremendous trust and faith in the county health departments and support of the State Board of Health. Within the last 18 months federal, state, county and town officials have provided funds for the construction of eight main county health department buildings, ranging in cost from $55,000 to $350,000. In the last 12 months this same leadership, working together in support of the public health program, has provided for construction of 34 branch health clinic or center buildings at a total cost of over a half million dollars. At least 12 to 15 more branch centers are being arranged for and will be under construction in the next six months.

Here I must give much credit and express thanks of public health workers and the people of the state to the Mississippi Commission on Hospital Care and the Public Health Service for channeling to these facilities a major portion of the funds required. Thus, in the last 18 months an

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outlay of $1,600,000 has been provided for local health department facilities. I consider this as recognition of what we in public health can do for Mississippi and a mandate that we do it—and certainly not a monument to what we have done. These new facilities afford expanding opportunity for more service, for better service, in increasing respectable environments. I cannot justify spending $15,000 to $20,000 on each of many new branch clinic buildings to be used one or two part-days per month. As they are put into service you should see that health services are made available in them at regular intervals more frequently than once or twice per month. This will justify the faith and trust which are bringing them into being for a better health program.

RADIOLOGICAL HEALTH

X-ray and nuclear radiation are types of energy undergoing most rapid development and usage. The ability of these types of energy to penetrate solid and semisolid media, to produce chemical and physiological changes in human tissue, animals, plants—all living matter—to create useful energy of many types, and to induce genetic changes in living matter which can be reflected in generations to come—yes, all of this demands public health evaluation and increasing control.

Today, we find radiation sources and extensive usage in every health department, most physicians' and dentists' offices, hospitals, and in many so-called professional offices (where they are used purely as advertising). And now, nuclear radiation usage becomes increasingly essential to economic, defense and health progress. In Mississippi today, there are about 50 users of nuclear isotopes who have well over 100 sources in their possession. Prospects are for rapid development of nuclear radiation energy in salt dome explosions, river channeling—these and other usages being added to construction of submarines and other ships on our Mississippi Gulf Coast.

In January of this year, the state health departments of the nation were informed by the Atomic Energy Commission and the Public Health Service that the governor of each state was being requested to prepare to take over responsibility for nuclear radiation control from the Atomic Energy Commission as soon as possible. Prior to this time Congress had designated the Public Health Service as the federal agency responsible for national level radiation control. In August, Governor Barnett through executive letter designated the State Board of Health as the responsible state department in Mississippi to prepare itself for and develop a program of radiation evaluation and control.

This probability was anticipated in June at which time preparations were begun by employing a health physicist with a broad background of experience and specialized training in radiation physics. At our regular Board of Health meeting last Monday, Dec. 5, regulations were adopted to implement control as a part of our general public health program. Without doubt, the next regular session of the Legislature will consider a model law which will further strengthen control of safe and proper maximum use of all types of radiation.

The new regulations will require, among other things, registration with the State Board of Health of all x-radiation and nuclear radiation equipment and sources to serve as a continuing index of the kind and amount of radiation being used now and in the future and give direction to control activities. Through monitoring consultation services of the physicist, those who use x-ray, fluoroscopes, radium, and nuclear radiation sources will be advised as to hazards to themselves and those they serve and informed of required corrective measures to reduce unnecessary radiation. First, we want to be sure that x-ray equipment being used in our own health program is with maximum efficiency and safety. Through the enthusiastic material help of the State Department of Civil Defense, Surplus Property Commission, U. S. Public Health Service, and others, necessary equipment and laboratory capability are being developed. You will hear more and participate more in the near future about this, another example of expanding opportunity in public health.

CIVIL DEFENSE

For several years national, state, and local efforts have been directed at developing a workable program of civil defense. These efforts have apparently not kept pace with the rate of increase of possibility of a world-wide war of annihilation. Interest and effective action have been sporadic and still leave much to be done in preparation to cope with a serious catastrophe. More recently, action in Washington designated the public health service to take such steps with state health departments as would result in state and local health agencies accepting leadership in developing programs which would make official health agencies capable of mobilizing all health and medical care facilities and professions for casualty and medical needs when and where needed. This would, of course, be a part of total civil defense effort and enmeshed into the State Civil Defense program as a whole. We are planning for, and anticipate, maximum participation of all state and local health department personnel, capabilities, and facilities.

Preparation for this task is a new opportunity which we hope materializes in the next few months in cooperation with state and federal civil defense agencies and the U. S. Public Health Service.

The first move in that direction would be an intensive in-service training program for all official public health employees in mass emergency medical and health care in all ramifications. Another facet of preparation will likely be decentralization of medical and health emergency stockpiles of supplies from a few regional storage centers in the southern states to local control under management of county health departments. Along with this will need to be developed voluntary, but effective, participation by physicians, hospitals, nurses, dentists, pharmacists, and all other professional competencies in the fields of medical and health care and environmental health protection. This is another example of need and demand for adapting capabilities of public health workers and facilities under their control to changing and new demands.

CARE OF THE AGING INDIGENT

A more recent development at a national level was the passage of the Kerr-Mills legislation to provide medical, dental, hospital, nursing, and other health care services to those over 65 years of age and on welfare rolls and to those not on welfare, but who might be considered medically indigent or unable to provide all their medical care needs. Funds for financing this program in Mississippi would be primarily from federal sources to be matched by a much smaller proportion of state funds.

I am not proposing that Mississippi does or does not participate in this medical care program. Nonetheless, I am firmly convinced, as are all other state health officers, that if it is instituted, it should be as a part of the general official public health program rather than setting up still another health agency which would not have the advantage of experienced health administrators nor health and medically oriented staff. Our existing health personnel and facilities in Mississippi are statewide in scope of activities and facilities. Public health is already involved in many activities relating to the medical and health needs in all groups and can develop, or already have established, working relations with physicians, hospitals, dentists, nursing homes, pharmacists, and others who must render the various services that might be provided under such a program. In its final analysis such a program as this legislation might provide with maximum state matching could become an efficient reality only to the extent that the professional people who would be called on to render the various services would organize and agree to render the services under acceptable standards developed primarily by these groups working as a whole.

I am saying that if and when the state of Mississippi launches into a medical care program of this type, we have dispersed throughout the state about 750 medically oriented people in official public health who by their participation could assure a much greater degree of success with desirable conservatism than could be developed in many years by an agency or department which is not statewide in scope or medically oriented.

DENTAL HEALTH

Certainly, one of the most common deficiencies in general health is in the field of dental health. Recognizing this relative deficiency, a new dental health unit is now in operation under supervision of a well-trained public health dentist. More recently one additional dental hygienist has been added to this unit. This new strength in dental health personnel can, and should, expand opportunities for associated state and local personnel to be more effective in overcoming this problem of dental health deficiency with full support and cooperation of the dental profession.

In the grant of federal general health funds to the state, all of the increase of 1960-1961 grant was earmarked for development of a better nursing home program to improve standard of care and facilities. Certainly, this is needed. In line with this objective a nursing home services unit has been set up as a part of the administrative division. It is headed by a supervisor, and a public health nurse is now an integral part of the unit. Already recruited and shortly to be added is a dietitian, and efforts are being made to recruit a physical therapist. These four people will work as a team with nursing home owners and their staffs, and central and local public health employees toward improved facilities and care.

ACCIDENT PREVENTION

I can only mention briefly other opportunities which are evolving. Accident prevention is most important as demonstrated by the rapid increase of injury and deaths due to accidents. We are suggesting a five-year study of accidents among all employees of the state and county health department employees and their families to determine what our own experience is and as a possible demonstration to other groups. Seat belts have proved their value in reducing injury and death from car accidents. I suggest that all of our employees in-

stall and use seat belts for their own personal safety and as a demonstration to those to whom we owe leadership.

LABORATORY

Increasing resources are being developed in our central laboratory, particularly in the fields of virology and technical application of fluorescence in laboratory aids.

There are many other intriguing opportunities at hand or in prospect which deserve mention, but I shall not pursue them at this time. There is nothing static in total opportunity in health protection. There may be a fixation complex in some of our minds or actions, but the public health movement is dynamic, presenting new opportunities for better health protection daily. I congratulate and commend you for excellent work in the past and anticipate even better for the future. ★★★

2423 North State Street

'PRIVATE' PRACTICE, UNCLE'S STYLE

Nearly one out of every three Americans, including more than 22 million veterans, is eligible today to receive at no cost to himself some degree of federal medical care. This is Uncle Sam's list of patients as of January 1, 1961:

22,515,000	living veterans.
5,200,000	military personnel and their dependents.
300,000	beneficiaries of the public health service, including 200,000 seamen.
5,100,000	public assistance recipients.
14,000,000	additional persons over age 65, newly eligible under medical assistance for the aged.
370,000	Indians and Alaskan natives receiving care in 56 federal hospitals or from contract physicians.
4,000,000	beneficiaries of the Federal Bureau of Employees' Compensation, including 1,730,000 under the new federal employees' health insurance program.
3,450,000	dependents of federal employees under the government workers' insurance plan.

Black Widow Spider Bite: Case Report

CARL D. BRANNAN, M.D.

Jackson, Mississippi

Latrodectus mactans, the black widow spider, is especially prevalent in the South. Because of its preponderance in areas of human habitation, the danger of arachnidism is more extensive than is often realized. The author discusses the clinical picture of black widow spider bite and differential diagnosis. A case report is presented.

THE BLACK WIDOW SPIDER *(Latrodectus mactans),* the insect responsible for arachnidism, has been known to be poisonous for man for centuries. This spider has been reported in every state in the continental United States except Vermont, and is especially prevalent in the southern states, the Ohio Valley, and the western coastal region.[1]

WIDESPREAD PROBLEM

It is found in largest numbers in the vicinity of human habitation, not only in outdoor privies, but also in beds, garages, automobiles, tents, and even high office buildings. Therefore, the arachnidism menace is more extensive than one would expect. Blair[2] in 1933 emphasized the seriousness of this problem to man when he described the clinical syndrome that followed the bite of a female *L. mactans* after application of the spider to his own finger.

These spiders are cannibalistic, feeding on each other whenever the opportunity presents itself. Due to the female's habit of capturing and feeding on the much smaller male after he has served the ends of species preservation, she is given the name "Black Widow." The male is ignored as an etiologic factor of any importance because of size, timidity, and scarcity.

HOUR GLASS MARKING

The globular black abdomen of the female, which bears on its ventral surface a rich, red marking resembling an hour glass, is a familiar characteristic of the species. The full-grown female, especially when distended with eggs, appears to be most poisonous. A timid creature, when disturbed she tries to escape. When confined in clothing or bed clothes or sat upon, she will bite. The venom of the black widow is 15 times as potent as a rattlesnake.[1]

Knowledge of the clinical entity of arachnidism is important since many spider victims are subjected to needless operations. The symptoms often simulate an acute surgical abdomen. Almost every article written concerning the acute abdomen includes arachnidism in the differential diagnosis. If a detailed history and a careful physical examination are not done, a needless surgical procedure may be performed.

CLINICAL SIGNS

The clinical picture reveals:

1. Excruciating local pain at bite site (not always identified)
2. Rapid local edema and redness at site
3. In 10 to 15 minutes, a burning sensation, spreading from site to involve whole body, passing off in 20 to 30 minutes
4. Sudden abdominal pain, often cramp-like as in an acute surgical abdomen
5. Cramp-like pains in legs, arms, and back
6. General weakness
7. Restlessness, extreme fear, even hysteria
8. Headache, nausea, and vomiting
9. Burning of soles of feet (may be pathognomonic)[3]
10. Convulsions in children—paralysis, cyanosis, dyspnea are variable

From the Department of Surgery, Mississippi Baptist Hospital.

PHYSICAL FINDINGS

The physical examination shows:

1. Bite site—red, and edematous (when it can be identified)
2. Board-like abdomen—*non-tender*
3. Hypersensitive skin
4. Calf muscle tenderness
5. Profound shock or normal blood pressure
6. Temperature normal or slightly elevated
7. Slow pulse—80 or below
8. Moderate leukocytosis
9. Priapism

TREATMENT

About 60 preparations have been used for the treatment of arachnidism.[3] Among these are alcohol (contraindicated, fatal results reported),[4] strychnine, sedatives, intravenous magnesium sulphate, hypertonic glucose, morphine, convalescent serum, antivenin, neostigmine, calcium salts, and frequent hot baths.

Differential diagnosis should include ruptured abdominal viscera, especially peptic ulcer, acute appendicitis, acute pancreatitis, cholelithiasis, nephrolithiasis, and acute intestinal obstruction. In addition, acute poisoning, tetany, tetanus, and gastric crises may be differential problems.

CASE REPORT

J. W. F., 29-year-old white male, was admitted to the Mississippi Baptist Hospital Sept. 19, 1956, with a chief complaint of abdominal pain. He had been well until morning of admission. While eating breakfast at 6:30 a.m., he developed severe abdominal pain, which began in the right lower quadrant and spread over the entire abdomen and chest. Pain was most severe in the epigastrium and midsternal area. He was nauseated and vomited twice, which was more gagging than actual vomiting. The pain had been continuous up to admission at 10:00 a.m. He complained of backache, headache, chest pain, pain in arms, shoulders, and legs.

He gave a history of using an "outhouse" for a bowel movement at 5:30 a.m. the morning of admission. The stool was normal. He recalled no pain or stinging at the time. On the afternoon prior to admission, he had to go out in the woods for a bowel movement and recalled a sting such as an insect bite on the right hip at that time. No symptoms developed until 6:30 a.m. the day of admission. He gave no previous history of a similar attack of pain. The patient stated he was told he had "ulcerated stomach" in 1952. No x-ray studies were done, but he had abdominal discomfort and indigestion.

Physical examination revealed a well-developed, well-nourished white male lying flat in obvious generalized pain. His pulse was 70; blood pressure, 140/70; temperature, 98.6.

The abdomen was rigid but flat with no scars. There was no tenderness to palpation, no rebound tenderness, and no flank tenderness. Peristalsis was hypoactive. There was no inguinal hernia.

The genitalia showed a clear urethral discharge and priapism. No definite insect bite was visible on or around the genitalia or buttocks.

Examination of the extremities revealed deep tendon reflexes present and active. X-rays of the abdomen in flat and erect positions showed no free air beneath the diaphragm.

The clinical impression was: (1) black widow spider bite and (2) possible perforated ulcer.

HOSPITAL COURSE

On Sept. 19, 1956, at 11:30 a.m. the patient was given intravenously 10 cc. of 10 per cent calcium gluconate in 500 cc. saline. By evening he had no nausea or vomiting. The abdomen was stiff but nontender with no rebound. The dosage of 10 cc. of 10 per cent calcium gluconate was repeated. It seemed to help, but not dramatically.

On the second hospital day, the patient felt better. He had had profuse sweating during the night. Examination showed periorbital edema, and that the abdomen was somewhat softer with no pain. There was active peristalsis. He was not nauseated and was hungry. The skin of his palms and fingers were white and shriveled from repeated rubbing of perspiration from his face during the night.

By midmorning there was profuse sweating with generalized tremors, bilateral nystagmus, and carpal spasms. Ten cc. of 10 per cent calcium gluconate were given and the tremors and spasms were relieved in 10 minutes.

In the evening of the second hospital day, the priapism was still present, perspiration continued profuse, and the periorbital edema was better. There was no itching. The abdomen was softer with one plus muscular spasm remaining. There was slight epigastric soreness. The patient was definitely improving, but appeared to be quite sick and uncomfortable.

On Sept. 21, the third hospital day, the patient was much improved and his abdomen soft. On Sept. 22, he was asymptomatic and was discharged. The patient had been afebrile throughout his entire hospital stay.

The laboratory work showed hemoglobin 16.7 grams; white blood count, 19,000; 82 polymorphonuclear leukocytes; hematocrit 49 per cent.

Treatment consisted of calcium gluconate, Luminal, Demerol, and intravenous fluids.

SUMMARY

1. The clinical picture of black widow spider bite has been presented with a case report.

2. In the differential diagnosis of the acute surgical abdomen, black widow spider bite should be considered in order that an unnecessary surgical procedure might be avoided.

3. A significant diagnostic point in arachnidism is abdominal rigidity with no abdominal tenderness.

4. Priapism is also an interesting finding. ★★★

1151 North State Street

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NEW FACTS ON HEART RECOVERY

Experiments at the University of Texas show a new way to aid heart victims. They used radioactive iodine to depress activity of patient's thyroid, thus lowering his general metabolism. Result: Not as much blood is needed and load on heart is reduced. . . . Three Chicago doctors estimate from a recent study of a utility company's medical case records that as many as 15 per cent of heart attacks may occur in middle-age city dwellers without any sign of distress being felt by the victim.

The Insider's Newsletter

Clinicopathological Conference XIII

Conducted by the Department of Pathology
Mississippi Baptist Hospital
Jackson, Mississippi

A 55-year-old white female with a complaint of "black bowel movements" is the subject of February's CPC. Discussers are Drs. James C. Griffin, Jr., C. E. Wallace, Robert Henderson, and Kenneth M. Heard.

This 55-year-old white female entered the Mississippi Baptist Hospital on Nov. 9, 1960, complaining of "black bowel movements."

There had been a previous hospital admission here on Oct. 12, 1960, at which time she complained chiefly of pain in the left axilla and in the left infrascapular area. She was discharged on Oct. 18, 1960, with a diagnosis of segmental neuritis. During this admission a barium enema was done and reported as negative for evidence of inflammatory or neoplastic disease. Also during that admission an impacted third molar on the right was removed.

PREVIOUS HISTORY

She had done well since her discharge and two days prior to admission she had returned to work. Shortly after returning home late in the afternoon on this date, she became nauseated, this becoming worse on smelling food that was being prepared for dinner. She did not vomit but was unable to eat because of the severity of the nausea. She stated that the nausea was so severe that she became dizzy and would almost fall whenever she stood up. She was seen by her physician on the following day and he gave her some medication for the nausea. On the morning of admission (Nov. 9) she arose, felt better, and was able to eat a good breakfast. At about 11 a.m. on the date of admission she had a large foul-smelling black stool. Shortly thereafter she was admitted to the hospital.

It was stated that since her last admission she had had an increase in flatulence but no other gastrointestinal symptoms. There was no history of previous gastrointestinal disease. It was stated that she vaguely remembered a few black stools during the past summer but she attributed this to some drugs that she was taking. There was no history of any steroid therapy.

Her blood pressure was 122/78 on admission with a temperature of 98.6, pulse 88, and respirations 16 per minute. She appeared neither acutely nor seriously ill and was in no distress, being well oriented. Examination of the eyes, ears, nose, and throat was negative. On examination of the chest there was some tenderness along the intercostal area between the sixth and seventh ribs. Examination of the lungs and heart was negative. The abdomen was flat and soft. There were no abnormal masses felt. The bowel sounds were present but hypoactive. Examination of the extremities and the neurological examination were negative. Admission laboratory work showed a hemoglobin of 6.9 grams with 2,330,000 red cells. The hematocrit was 21 vol. per cent. The total white count was 9,300 with 49 per cent segmented neutrophils, 47 per cent lymphocytes, and 4 per cent monocytes. The platelet count was normal. Urinalysis was essentially negative except for 8 to 10 white blood cells per high power field.

X-RAY EXAMINATION

An x-ray examination of the upper gastrointestinal system showed anterior displacement of the esophagus near the cardioesophageal junction by a mass which was located along the left lesser curvature posteriorly. This mass was estimated to measure about 7 centimeters in diameter. In the mid-portion there was seen a crater measuring 1.5 centimeters which had a rather smooth margin and which was seen to contain an air fluid level on erect films. The remaining stomach was normal. No duodenal defects were noted. It was stated that the left kidney appeared to be displaced downward slightly by this mass which was

connected to the stomach but which was still located primarily posteriorly and in the retroperitoneal area. After several blood transfusions to improve the anemia, an operation was performed on Nov. 15, 1960.

Dr. James C. Griffin, Jr.: "We have the problem of a patient who is bleeding from the GI tract and the sites can be divided into upper and lower



Figure 1. X-ray of stomach showing large mass with ulcer.

GI tract with the stomach, esophagus, and upper small bowel included in the upper GI tract and the terminal small bowel and colon being included in the lower GI tract.

TYPES OF BLEEDING

"The bleeding can be of two different types with one being massive with the patient in shock on admission or it can be intermittent with the bleeding being occult and the presenting symptom is that of anemia secondary to chronic blood loss.

"The most frequent site of bleeding in the GI tract is a peptic ulcer with duodenal being higher in incidence than gastric. Twenty-five per cent of the patients that bleed from a peptic ulcer have not had previous symptoms so as far as symptoms are concerned, this could very easily be a peptic ulcer.

"When proceeding with diagnostic procedures for GI bleeding, particularly if it is of the intermittent slow type, I feel that a coagulogram should be one of the first steps performed.

"I was asked to see a patient in consultation for recurrent GI bleeding and this patient had previously been explored for uncontrolled upper GI bleeding and the only pathology found was cirrhosis secondary to childhood hepatitis. No definite bleeding point could be found so the so-called "blind gastrectomy" was performed and the patient did not bleed again until two years later at which time she was thought to have esophageal varices and was bleeding from same.

"I was asked to esophagoscope the patient to rule out varices and agreed to do so after a coagulogram was performed. The coagulogram was diagnostic of hypersplenism. If this had been obtained prior to her exploration, she might have avoided a gastric resection.

GI SERIES VALUABLE

"It is very valuable to have GI series and barium enemas to help localize the pathology, and we are fortunate in this case to have found the lesion which is the most likely site of bleeding.

"If the x-ray procedures are normal, one should proceed with esophagoscopy to rule out peptic esophagitis secondary to a small hiatal hernia. A patient can bleed massively secondary to peptic esophagitis.

"The protocol states that a peptic ulcer was located in the stomach and the next step would be to decide whether it is benign or malignant. With a benign gastric ulcer one usually has symptoms of pain and indigestion. The x-ray report in the protocol leads one to believe that the stomach and esophagus are pushed forward by a mass. If the ulcer has penetrated or perforated resulting in an inflammatory mass in the lesser sac, one would

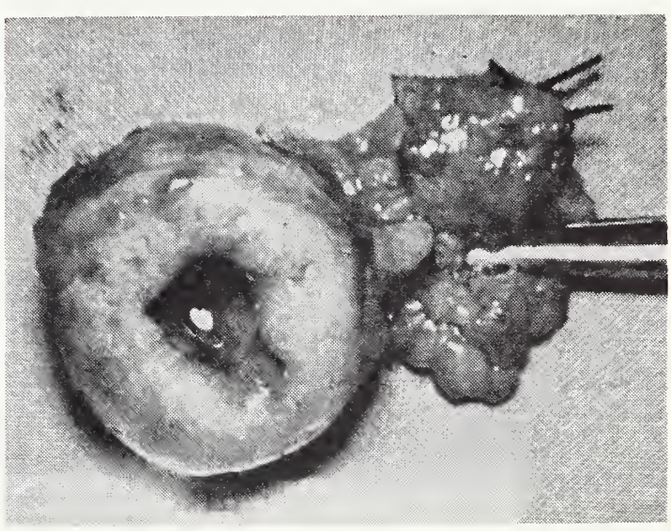


Figure 2. Mucosal surface over mass showing large ulcer.

expect the patient to have more pain, fever, and the white count should be markedly elevated. I

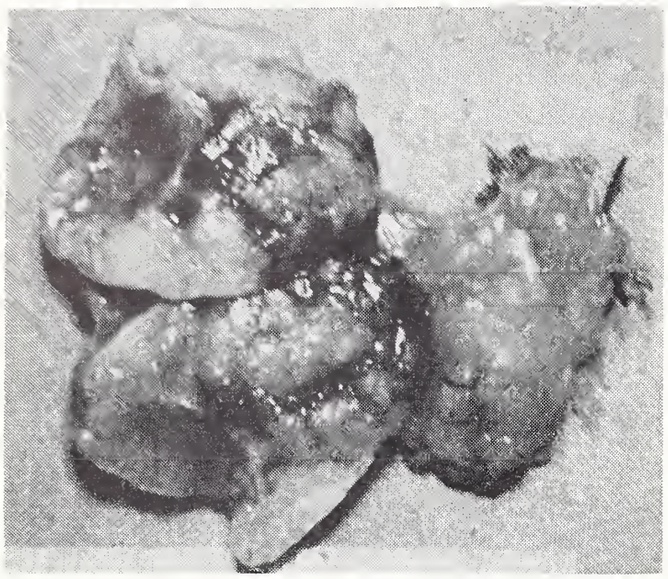


Figure 3. Cross section of tumor showing ulceration and hemorrhage.

do not feel that perforation or penetration is present here.

MEDICATION OR LESION?

"The patient gives a history of having had tarry stools one year ago which she attributed to medicine, which might have been, but we cannot rule out the fact that she had a lesion at that time from which she was bleeding. We will have to lean further toward this possibility rather than the stools being dark in color secondary to medication. Dr. Wallace may be able to clarify this point."

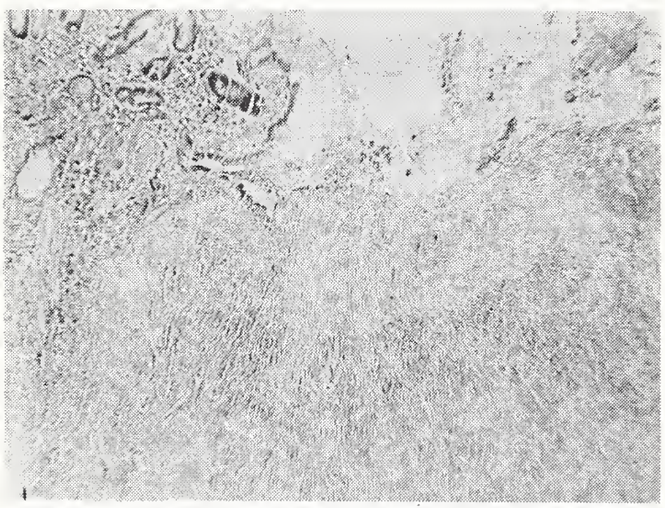


Figure 4. Microscopical view of base of ulcer showing necrosis and inflammation.

Dr. C. E. Wallace: "I know of no medication she was taking at the time to cause the change in the color of her stools."

DIAGNOSTIC POSSIBILITIES

Dr. Griffin: I strongly suspect that this patient had a lesion one year prior to this admission which was causing melena of the stools.

"If this was a malignant ulcer then I would expect the patient to have had more symptoms than she has experienced. She should have had weight loss with debilitation and pain.

"A malignant ulcer can actually penetrate and perforate but this woman had very few symptoms of a malignancy, particularly of a long standing malignancy. So I cannot accept this as being a malignant ulcer which has penetrated and given her a mass in the lesser sac. I have excluded both benign and malignant ulcer of the stomach.

"This brings us to the connective tissue tumors of the stomach and benign lesions. The adenoma is the most common benign lesion of the stomach



Figure 5. Tumor made up of bundles of smooth muscle cells.

and it usually presents intraluminally and the most common complication is a tendency to undergo malignant transformation.

THE LEIOMYOMA

"The leiomyoma is the second most common benign lesion of the stomach and can either grow intraluminally, intramurally or sub-serosally. The most common complication here is the tendency toward ulceration and bleeding. There are several other connective tissue tumors that I would like to mention in passing and they are the neurofibromas, fibromyomas, and lipomas.

"The neurofibroma is found most frequently on the lesser curvature near the pylorus. The lipoma

(Turn to page 72)

SPECIAL ARTICLE

Medical Education in Mississippi

Part II of III

ZEB VANCE BAUCUM, M.D.
Jackson, Mississippi

Part I of this three part series ended with the establishment of a two year medical school at the University of Mississippi on Sept. 17, 1903. Part II covers the problems and policies of the two year school. The establishment of a teaching hospital at Vicksburg is discussed and the reasons for the failure of the project are outlined. In conclusion, the author briefly considers the leaders and progress of the two year school. Part III will be published in Journal MSMA's March issue.

THE BATTLE FOR A state school of medicine was only partly won with the 1903 opening of the University of Mississippi two year medical school. During the first four years conditions were particularly unfavorable, principally because of inadequate quarters and the rather severe problem of obtaining cadavers. Instructors were another problem. Although there were 16 or 17 faculty members assigned to the school, most of these were administrative officers, teachers in other departments, part-time instructors, or student assistants. Thus, the full-time medical department professors had to teach a variety of courses in diversified fields. As the school grew, however, more teaching personnel were added to the faculty.

The quarters consisted of two rooms in the Lyceum building plus a small frame building, about 50 yards north of the Lyceum, which was used as a dissecting room. The dissecting room building was donated by the Honorable Harry Howard, a member of the Board of Trustees.

Although the Board of Trustees had authorized the chancellor "to take such action looking toward procuring in a legal way of human bodies for dissecting as needs require," the task was not an easy one. There was little one could do "in a legal way" to obtain cadavers in Mississippi. Fortunately, however, the problem was early recognized by the Mississippi Legislature. During the session that convened Jan. 1, 1905, a bill was introduced to allow all unclaimed bodies of the state charity hospitals to be turned over, under the supervision of the State Board of Health, to the medical department of the University. This bill passed the senate on its first day, but because of agitation over a certain feature, a motion for reconsideration was entered. After a heated debate the bill was tabled and not recovered during that session of the legislature. This action resulted in continued and unjust hardships for the medical department. Happily, though, this unfortunate situation was remedied during the next session of the legislature when the bill was reintroduced with committee recommendation for passage after having received detailed analysis prior to its discussion in committee. The bill was made law without any material oppositions. It has been revised twice since that time.

The problem of inadequate quarters was also early recognized and during the session of 1906-7 the science building was erected, thus providing commodious quarters for the medical department.

Mention has been made of the varying admission requirements of U. S. medical schools during this period. In its early years, the University of Mississippi required a student to (1) present an official certificate from a reputable college, normal

school, academy, or high school, (2) pass an entrance examination on English, arithmetic, physics, algebra, and Latin if unable to present a certificate, (3) make up deficiencies prior to entering the second year course if unable to pass the entrance examination on any two of the required subjects. Since that time, the requirements have followed the general trend of Class A medical schools throughout the United States in accordance with recommendations of the Council on Medical Education of the AMA.

REQUIREMENTS

From the beginning, the students were encouraged to take the composite course in medicine, i.e., the first two years of the regular college course followed by the two year medical course. Thus, they could qualify for both a bachelor's degree and a two year certificate from the medical department. This allowed the student to acquire both a bachelor's degree and a medical degree in six instead of eight years. This privilege, with some increased provisions coincident with increased admission requirements, is still permitted by most of the state senior colleges.

An additional privilege was granted to graduates of the school of arts, science, and literature of the University who had not taken the composite course in medicine or to graduates of any other institution of high grade. They were given credit for subjects completed and, by doing one year in the school of medicine, were given a two year certificate which allowed them to enter the third year of any accredited American medical college. This was permitted from the opening of the school and was continued for several years, but it has long since been abandoned. Otherwise, two year certificates were granted only to those students who gained admission to the medical department by qualifying in one of the several categories previously mentioned, and who successfully completed all the courses required for the first two year course.

FIRST GRADUATES

Although sophomore students were enrolled as early as the first session, the records do not indicate that any two year certificates were granted until the 1905-6 commencement when six certificates were given. Recipients were Benjamin Howard Durley of Aberdeen (who also received a B.S. in medicine), John Marvin Furr of Pontotoc, Grover Cleveland Kirby of Carrolton, Ellyson Gwynne Merriwether of Hernando, Percy Augustus Perkins of Collierville, Tenn. and Arthur Henry Smith of Sumner.

By 1907, the two year school had secured an adequate foundation and attention began to be focused on adequate facilities for the teaching of the last two years.

In his narrative report to the Board of Trustees on Dec. 10, 1907, Chancellor Andrew A. Kincannon stated that he was pleased to commend the work of the medical department, that attendance had almost doubled, and that the outlook for the future was promising. He recommended in his report that the last two years of the course in medicine be added to the curriculum to be taught in a large city as was being done by other universities. He went on to request that the Old Capitol be transferred to the University for the purpose of establishing a hospital in which the clinical years of medicine could be taught.

A TEACHING HOSPITAL

Apparently, some groups were interested in commercializing the Old Capitol grounds and building, for Chancellor Kincannon went on to point out that "patriotic sentiment caused opposition to any commercialization efforts that would raze its walls to the ground and make the site a business mart." He suggested that utilization of the property as a teaching hospital would "greatly broaden the aesculapian philosophy of our young men." Although this request was not granted, an opportunity to expand the medical school to the full four years was presented to the University only about three months later. In March 1908, Drs. B. B. Martin and E. F. Howard approached Chancellor Kincannon relative to the University accepting the State Charity Hospital at Vicksburg for teaching purposes. They expressed the opinion that the Board of Aldermen of Vicksburg and the Board of Supervisors of Warren County were disposed to turn over the hospital to the University for this purpose, and, if the Chancellor cared to consider the proposition, it was assured that necessary papers would be drawn up and matters made in every way satisfactory to the University.

Chancellor Kincannon then called a meeting of the Board of Trustees in Jackson on March 28, 1908, for consideration of this matter. At that meeting a committee was appointed to go to Vicksburg to investigate the hospital. Its members included Honorable W. E. Baskin, Honorable J. T. Senter, and Honorable J. L. Taylor. They reported favorably at the next meeting and the hospital was accepted. It was the initial plan to begin instruction in Vicksburg in Sept. 1908. Due to the limited time between acceptance of the

hospital and the proposed opening date, it was later thought best to delay the opening for one year to allow sufficient time for election of the faculty and other arrangements.

Several of the Vicksburg faculty were already associated with the State Charity Hospital there or were practicing physicians in Vicksburg. The Vicksburg session opened on Sept. 23, 1909. Records for that year are not available because the University has only a few scanty records of the Vicksburg session and the State Charity Hospital (now Kuhn Memorial) does not have any records prior to 1912.

ENROLLMENT

The Aug. 14, 1909 *Journal of the American Medical Association* reported that 27 students were enrolled at Vicksburg. It is assumed that this figure refers only to the Vicksburg enrollment because in the Aug. 20, 1910 *JAMA* it is stated that the total enrollment in the medicine department of the University of Mississippi for the session of 1909-10 was 49.

From the records available, it is apparent that a well-ordered teaching program was planned. Mention is made of a dispensary in connection with the hospital, which would offer 2,000 to 3,000 patients annually for medical treatment. A nursing school in connection with the hospital is also discussed. It is not clear whether either of these plans were ever effected. However, a college building as an annex to the hospital was constructed during the first session—apparently in Jan. 1910. It was a three story building used for teaching and student housing. This building was completed at a cost of $16,000 and was paid for by state and city funds and private donations.

COMMENCEMENT EXERCISES

Little is known about the events of that first and only year at Vicksburg, except that Chancellor A. A. Kincannon awarded four degrees at the commencement exercises on May 20, 1910. Three of the four graduates were John Cornelius Herrington, Lee Kelly Mayfield, and George Wilson Montgomery. The identity of the fourth member of that class is not known. In the absence of the dean, the commencement exercises were presided over by Dr. Hugh H. Haralson and the commencement address was delivered by Rev. William Mercer Green. These exercises not only rang down the curtain on the first year's work at Vicksburg, but also rang down the curtain on any further teaching of clinical medicine in Mississippi by the University until the opening of the University Medical Center in Jackson in Sept. 1955.

The reason the medical department of the University of Mississippi at Vicksburg was closed is simple—the legislature failed to appropriate funds for its continuance. However, the reason for this lack of action is not so clear. The matter of economics certainly entered the picture. Another related factor was the appropriation of $50,000 toward erection and equipping of a central state charity hospital at Jackson. These reasons are speculative. Perhaps things were not as smooth at Vicksburg as the scanty amount of material available today seems to indicate. Abraham Flexner predicted in his 1910 report on medical education in the United States and Canada that the school would be closed. This prediction was based on observations made during his visit to Vicksburg in Nov. 1909.

UNIVERSITY—BEHIND

From a chronological point of view the University was four years behind in Mississippi in graduating its first class of physicians in 1910. During that year the Mississippi Medical College at Meridian was graduating its fourth class. The Mississippi Medical College was Mississippi's third medical college and was issued a grant of charter as a stock company by the state of Mississippi on June 14, 1906. Its incorporators were N. L. Clark, M. J. Lowry, W. W. Hamilton, J. E. Seale, F. L. Walton, W. W. Reynolds, and T. A. Barber, and its corporate domicile was at or near the city of Meridian.

The Mississippi Medical College opened on Oct. 1, 1906, with a faculty of 14 and with a total enrollment of 106 in all four classes. At the end of its first year of operation 22 candidates were graduated. The address at that first commencement was delivered by Governor James K. Vardaman, who at that time was a member of the Board of Trustees of the Mississippi Medical College.

Because this paper is not primarily concerned with the operation of the Mississippi Medical College, its history will be briefly summarized. It operated for a period of six years, opening in 1906 and closing at the end of its sixth session in 1912. It was given a Class C rating by the Council on Medical Education of the American Medical Association in 1907 and retained this classification throughout its remaining years. Its closing was primarily attributed to reform movements prevalent in medical education in that era throughout the United states. These reforms, although originating some four decades previously, were given added force and direction by the appearance of the Flexner report in 1910. Flexner gave the Mississippi Medical College a severe scathing,

stating emphatically that this school was without merit and should be closed.

At its meeting on Feb. 26, 1913, the stockholders of the Mississippi Medical College decided to sell its property and make final liquidation of its assets. A committee consisting of E. A. Morrison, H. F. Broach, Jr., and T. J. Houston was appointed for this purpose. They subsequently sold the property to the Y.M.C.A. and final liquidation of the college corporation occurred in the latter part of 1913.

The Vicksburg project having failed, attention was once again focused on the two year school at Oxford. Certainly the closing of the Vicksburg school must have been a staggering blow to those persons, such as Chancellor Kincannon and Dr. Leathers, who had worked so long and hard to see it come about. Yet it may well have served as a stimulus to work even more vigorously to make the two year school one of the best in the country. From its very beginning the two year school was a member of the Association of Southern Medical Colleges and during its first year it became fully sustained by the Association of American Medical Colleges. In 1907 it attained a Class A rating by complying with standards adopted in 1906 by the Council on Medical Education of the American Medical Association. The Council was established in 1904 and during 1907 completed a tour of inspection of the medical schools in the United States. Thus, 1907 was the first year schools were given a class rating.

During the next few years no significant changes occurred in the medical department of the University of Mississippi. A determined effort was made to offer the best training possible in the basic medical sciences. New and better equipment was added as finances would permit, and new faculty members were added.

As the reform movements began to affect medical education throughout the United States, so it affected medical education in Mississippi. Concomitant with these reforms was an increase in admission requirements. In 1914 the University of Mississippi required one year of premedical college training for the first time. In 1918 this requirement was raised to two years of premedical training.

Beginning with the 1934-35 session this requirement was raised to the present requirement of three years or a total of 90 semester hours. The only changes made since that time have pertained to emphasis on subjects required and not on number of hours required.

In 1924 the University of Mississippi Medical School lost the services of one of the "pillars" of the school when Dr. Waller S. Leathers resigned as dean and professor of physiology and hygiene to accept the chairmanship of the department of preventive medicine and public health at the then reorganizing Vanderbilt University School of Medicine. In 1927 he was made associate dean of the Vanderbilt University School of Medicine and became dean in 1928. He also served as executive officer of the Mississippi State Board of Health from 1910 to 1924, resigning from this position at the same time that he resigned from the University. He was succeeded in this capacity by Dr. Felix J. Underwood. Although his services were lost, his influence remained. During the early days of planning for the present University Medical Center, his advice and counsel were often sought. Suggestions made in several letters written by him to Dr. H. R. Shands, of Jackson, were incorporated in the organization, policy, and structure of the Medical Center.

(Part III will appear in the March 1961 issue of JOURNAL MSMA). ★★★

1190 North State Street

WEIGHTY MATTER

A British doctor, reported in *Insider's Newsletter,* collected all the ad material received from drug companies last year. Total weight: 111 pounds, 3 ounces; total postage: $50.

MEETINGS

NATIONAL AND REGIONAL

American Medical Association, June 26-30, 1961, New York City. F. J. L. Blasingame, Executive Vice President, 535 N. Dearborn St., Chicago 10, Ill.

American Academy of General Practice, April 13-20, 1961, Miami Beach, Fla. Mr. Mac F. Cahal, Executive Director, Volker at Brookside, Kansas City 12, Mo.

American Society of Internal Medicine, May 5-7, 1961, Miami Beach, Fla. Mr. G. Tod Bates, Executive Director, 350 Post St., San Francisco 8, Calif.

Mid-South Postgraduate Medical Assembly, Feb. 14-17, 1961, Memphis, Tenn. Omar Simmons, President, Newton, Miss.

New Orleans Graduate Medical Assembly, March 6-9, New Orleans, La. Mrs. Irma B. Sherwood, Executive Secretary, 1430 Tulane Ave., New Orleans 12, La.

Southern Medical Association, Nov. 6-9, Dallas, Texas. Mr. Robert F. Butts, Executive Secretary, 2061 Highland Ave., Birmingham, Ala.

Southern Society of Anesthesiologists, March 9-11, 1961, Jackson. Curtis Caine, local arrangements committee, 4332 Manhattan Road, Jackson.

STATE AND LOCAL

Mississippi State Medical Association, May 9-11, 1961, Biloxi. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson.

Mississippi Academy of General Practice, Sept. 27-28, 1961, Jackson, Miss. Miss Louise Lacey, Executive Secretary, Walthall Hotel, Jackson, Miss.

Mississippi Society of Internal Medicine, May 8, 1961, Biloxi. Frederick E. Tatum, Secretary, 707 Katie Ave., Hattiesburg.

Amite-Wilkinson Counties Medical Society, First Tuesday March, June, September, December. S. E. Field, Centreville, Secretary.

Central Medical Society, First Tuesday Monthly, 6:30 p.m., Robert E. Lee Hotel, Jackson. George E. Gillespie, 514-A East Woodrow Wilson Drive, Jackson, Secretary.

Claiborne County Medical Society. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Second Wednesday March and November, 2:00 p.m., Clarksdale. Robert R. McGee, 150 Yazoo Ave., Clarksdale, Secretary.

Coast Counties Medical Society, First Wednesday March, June, September, and November. Charles N. Floyd, 1412-23rd Ave., Gulfport, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday January, April, July, and October, 1:00 p.m., Hernando Motel Cafe, Hernando. L. L. Minor, Route 9, Memphis 9, Tenn., Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. A. Wayne Sullivan, 1204-21st Ave., Meridian, Secretary.

Homochitto Valley Medical Society, Fourth Tuesday Monthly, 7:30 p.m., Natchez Country Club, Natchez. W. T. Colbert, Natchez General Hospital, Natchez, Secretary.

North Central District Medical Society, Second Wednesday March and September. W. A. Middleton, 214 Summit St., Winona, Secretary.

Northeast Mississippi Medical Society, Second Tuesday March, June, September, and December, Tupelo. Thomas W. Wesson, 421 Main St., Tupelo, Secretary.

North Mississippi Medical Society, First Thursday January, April, and October, Oxford. R. L. Wyatt, Holly Springs, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. Samuel O. Massey, Jr., 220 E. Canal St., Picayune, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. Thomas F. Puckett, 715 Arledge St., Hattiesburg, Secretary.

Tri-County Medical Society, Second Tuesday March, June, September, and December. A. V. Beacham, Magnolia, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Tom H. Mitchell, The Street Clinic, Vicksburg, Secretary.



The President Speaking

'Three Gets You Five'

G. SWINK HICKS, M.D.
Natchez, Mississippi

THE YEAR 1960 BELONGS TO HISTORY and our nation has the job of living in the present. But the past is money in the bank of experience, profit from doings and undoings, and for the wise and provident, a guidepost for the future. No doctor of medicine should forget 1960 because it's the year when a liberal Congress almost listened to 16 million labor union members in having a sayso over welfare and social legislation. The year 1960 was when medical care was the number one issue before the Congress, when competition for this position of interest included Russia, the summit, Red China, outer space, Castro, the Congo, the tragedy of 40,000 highway deaths, and the highest national income in our history.

The nation was separated from total socialization via the Forand route by a slim majority of four votes in the United States Senate. Now the purpose of reciting these grim statistics isn't necessarily the flogging of a dead horse but they're worth remembering because this year, next year, and every year thereafter the fight will be tougher. And, within this framework is found the theme of my appeal.

Each physician must become a volunteer who will give a little more time to save himself. We are engaged in an unbelievably desperate, urgent, and critical mission—every able hand is needed. Yet, some physicians are doing little more than shaking their heads and saying that ". . . Hicks, those other officers, and that Board of Trustees had better get on the ball or we'll be in real trouble with the new Congress."

As is true of presidents who preceded me, I can tell you of the few among us who give generously of their time in behalf of the association. There are surgeons who don't touch a knife for a week at a time; internists out caring for the association's interests as they would a difficult coronary occlusion; generalists who call on their colleagues to deliver their obstetrical cases because they're out working for MSMA; and many more—many from every specialty—many who spent the night on the airlines after meetings in Washington, Chicago, San Francisco, or wherever the job took them.

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JOURNAL OF THE
MISSISSIPPI STATE
MEDICAL ASSOCIATION

Volume I, Number 2

February 1961

EDITORIALS

Economics and Medical Care: The Case for Private Insurance

I

A FREE ECONOMY consists of four distinctly separate yet integrated functions: production, distribution, finance, and communication. The third function has assumed a special significance to consumers and providers of health services because *more* medical care for *more* people involves increasingly greater expenditures. Within the system of a free economy's financial structure, there are four pillars upon which barter and exchange of goods and services are based: coin and redeemable currency, banking and credit, marketing and exchange of securities, and insurance.

This fourth aspect of finance plays a key role in the purveyal of health services. None of these fundamental facts of distribution economics is intended to infer that the Aesculapian staff casts a dollar mark shadow. Through the *Principles of Medical Ethics,* physicians have declared that remunerative aspects of their profession are secondary to professional obligations which they have assumed voluntarily. Practically, however, the American pattern of medical care in its free economic environment must necessarily involve costs and expenditures. The medical care consuming public appreciates this fact of twentieth century life because 128 million citizens own some type of health insurance and prepayment contract.

II

But why should a doctor of medicine be concerned with voluntary health insurance? Addressing himself to this query, Dickinson wrote that ". . . the physician has a professional interest in the success of voluntary prepayment medical care plans because they demonstrate the determination of his profession to provide a sound method of budgeting the costs of better medical care. As a citizen of the community, he has an interest in their success because they offer the best way of solving, on a democratic basis, the difficult social and economic problems created by the irregularity in the family's need for the services of physicians. As these plans develop, the physician will come to look to such plans for a more or less substantial part of his income. He will want to be certain that they will be able to fulfill their obligations."

By no means was Dickinson saying that the doctor's first interest is of an economic nature. He was making it unmistakably clear that success and solvency in the voluntary insurance movement are merely practical means through which the physician's primary mission of service can be assisted.

Bryan puts it this way: "Now of course the doctor is not ordinarily concerned with the ways and means by which his patients get the money to pay for his services. He is interested primarily in

being able to treat his patients effectively and without interference from outside sources. He wants his patients to be able to have the care they need without undue economic privation; and, he hopes to earn a decent living for himself and his family in the practice of medicine."

III

The insurance industry offers the one practical, attainable, and logical means through which the economy of medicine can be stabilized to ameliorate or avoid economic dislocation and private financial catastrophe incident to illness. And this is being rapidly accomplished. In 1960, insurance and prepayment plans paid almost one-third of the nation's estimated $20 billion health care bill at the rate of $8.5 million *a day*. This gargantuan flow of insurance benefits represents a two to 27 per cent increase over those paid during the previous record high in 1959, *an increase of $500,000 a day*.

And this economic phenomenon was nothing less than the unlikely contemporary of the mightiest bid yet for federal health service under Social Security, the Forand proposal.

No single segment of the American economy approaches the insurance industry in terms of capital vitality. During the first three quarters of 1960, the life insurance industry alone made available more than $4.3 billion in new capital funds. Additional monies for reinvestment from maturities, refundings, prepayments, amortization, roll-over on short term securities, and sale of old investments totaled up to almost $14 billion—an amount equal to one-sixth of the entire national budget.

During this same nine month period, private health insurance benefits amounted to $2.3 billion divided among hospital, surgical, medical, major medical, and income replacement payments. Over 43 million persons—some 62 per cent of the nation's work force—were protected by insurance against income loss due to disability.

IV

Albeit a commercial venture in the purest capitalistic sense, a description to pronounce with pride, the insurance industry can present a mighty case in its own behalf. Usually, it doesn't, rather leaving its record of performance to speak for itself. The *bona fide* industry is one of the most carefully regulated of national business endeavors. It is under the constant scrutiny of federal, state, and municipal governments, subject, if you please, to the pleasure of the executive, the legislative, and the judiciary. Its premium rates must be justified before regulatory bodies; its books are open to government; its payments of benefits are public record; its profits are published; it pays taxes. Yet, it manages to be competitive.

Insurance doesn't create any new money but there are those who seem to feel it does. The thoughtful realize that insurance is merely a way of pooling money to provide for some future unforeseen economic adversity which they alone would be otherwise unable to meet. When insurance benefits are collected, it is the purchaser's money coming back to him through the pool he helped to create. Assuredly, it's not the company's money. The proportionately small profit of the carrier was earned when the contract was sold.

To complicate matters further, the price of insurance cannot necessarily be determined by costs incurred in the past. Insurance costs depend upon future events which may or may not occur. The insurance contract is a promise to meet obliga-



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BOSERMAN

"To let her know how much people like you, I told her you've been treating Mrs. Brown's stomach for 30 years . . . she said she believed she would try someone else."

tions which have not been incurred when the promise is, in fact, made. The insurance industry has the problem of collecting in advance of performance large sums of money which later may be claimed by persons not parties to the contract. Under any insurance contract, the cost of service promised is greatly disproportionate to the price paid. Further, the contract commits the company to furnish indemnification contingent upon unknown future events. The insurance "product," then, is exceedingly difficult to judge as compared with other products, say an automobile where the manufacturer can itemize component parts and other cost factors.

But this convincing case is based upon a record of performance, not promises alone.

V

It is difficult to distinguish between the concern of the doctor and the patient when the voluntary insurance financing mechanism occupies a position in the medical care picture. Although each is on a different end of the premium dollar's trip, they share equally in the benefits it provides. The assured patient knows—if 128 million Americans know anything at all—that the voluntary insurance mechanism is a highly efficient method of budgeting health care costs. The physician recognizes that he and his medical organization have been challenged to devise a satisfactory system to assure distribution and availability of medical services. Insurance is the best answer yet within the framework of the private practice pattern. If it is not, then the doctor faces the uncomfortable alternatives of hoping for something better or losing his position as master of his own house.

Bryan sums it up neatly: "We should recognize that the prepayment medical care movement is a crucial test of democracy. It is a giant laboratory experiment which will determine whether our American society is capable of solving, on a voluntary basis, a complex social problem of continental proportions. The challenge presented by the prepayment medical care system—the challenge to use it, to expand it, to improve it—this challenge, I suggest, will call for medical and administrative statesmanship of the highest order." —R. B. K.

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The President Speaking: 'Three Gets You Five'

(Continued from page 66)

But in 1961, let's remember that twice as many of us can do three times the work now done by the half of us. Let's give just one hour a week more than we're giving now. Let's talk with just one additional colleague about the issues. Let's write just one more thoughtful letter to our congressman. Let's talk about health care issues with our banker, our lawyer, our insurance counselor, our C.P.A., our pastor, our patient, and our taxi driver.

And it isn't enough to be a good organization member where medicine is concerned—we must also be good citizens in the community. The chamber of commerce should have an active, working committee on health and medical affairs. We should support the chamber or association of commerce with our dues and attendance. Doctors must be a part of service and civic organizations.

And what have we accomplished in 1960? I can speak as your president for seven months of that year. We were successful in our legislative activities, we completed and paid for a needed addition to our fine headquarters building, we initiated publication of this new JOURNAL which has won national acceptance, and we conducted our biggest annual session in 104 years of association history. Our membership—thanks to my predecessor, Dr. Stanley A. Hill, and particularly to the president-elect, Dr. Lawrence W. Long, and the three vice presidents, Drs. Davis, King, and Jenkins, is at an all time high. But is this enough? Not quite.

Those of us serving in elected and appointed posts of responsibility need your help as we work to make your voice heard and your influence felt.

We're playing in a league where the pennant or the conference championship is never won. The hits and runs and touchdowns draw no ovations—only the errors and penalties make the sports section. We're a team trying to work ourselves out of a job by making the reason for our existence unnecessary.

As we think on these things which are of good and bad report, the year 1960 can tie the red ribbon around our finger to help us remember, if we need such reminder because three gets you five no physician will ever forget 1960. ★★★

NEW MEMBERS

BRAMLETT, JULIAN CHANDLER, JR., Oxford. Born Oxford, Miss., Aug. 23, 1926; M.D., University of Pennsylvania School of Medicine, Philadelphia, 1955; interned Baptist Hospital, Memphis, Tenn.; surgery residency, John Gaston Hospital, Memphis, Tenn., four years; U. S. Navy, two years; elected Sept. 15, 1960, by North Mississippi Medical Society.

BROWN, MARION HAVARD, Brookhaven. Born Lucedale, Miss., Jan. 18, 1930; M.D., Jefferson Medical College of Philadelphia, Pa., 1955; interned University Medical Center, Jackson, Miss.; general practice residency, Lafayette Charity Hospital, Lafayette, La., one year; Captain, U. S. Army, two years; elected Sept. 13, 1960, by Tri-County Medical Society.

COPELAND, JOHN THOMAS, JR., Starkville. Born Memphis, Tenn., June 16, 1932; M.D., University of Mississippi School of Medicine, Jackson, 1958; interned John Gaston Hospital, Memphis, Tenn.; elected Sept. 13, 1960, by Northeast Mississippi Medical Society.

GULLEDGE, JERRY BABB, Crystal Springs. Born Crystal Springs, Miss., Sept. 11, 1932; M.D., University of Tennessee, Memphis, 1956; interned Baroness Erlanger Hospital, Chattanooga, Tenn.; elected Sept. 13, 1960, by Tri-County Medical Society.

HOLLIS, RICHARD SHELTON, Amory. Born Amory, Miss., June 14, 1927; M.D., Tulane University School of Medicine, New Orleans, La., 1952; interned Charity Hospital, New Orleans; Ob-Gyn residency, Charity Hospital, New Orleans, three years; Captain, U. S. Air Force, two years; elected Sept. 13, 1960, by Northeast Mississippi Medical Society.

KIMBROUGH, GEORGE THOMAS, Laurel. Born Louisville, Miss., Nov. 21, 1928; M.D., Emory University School of Medicine, Atlanta, Ga., 1957; interned University Hospital and Hillman Clinic, Birmingham, Ala.; pediatric residencies University Hospital and Hillman Clinic, Birmingham, one year, University Medical Center, Jackson, Miss., one year; elected Dec. 8, 1960, by South Mississippi Medical Society.

PACE, BRANTLEY BARNARD, Monticello. Born Hattiesburg, Miss., May 11, 1933; M.D., University of Mississippi School of Medicine, Jackson, 1958; interned University of Texas Medical Branch Hospitals, Galveston; elected Sept. 13, 1960, by Tri-County Medical Society.

STONE, HENRY DECK, Batesville. Born Memphis, Tenn., May 15, 1930; M.D., Tulane University School of Medicine, New Orleans, La., 1954; interned East Tennessee Baptist Hospital, Knoxville; Lieutenant, U. S. Naval Reserve, two years; elected Dec. 30, 1960, by North Mississippi Medical Society.

DEATHS

BRANDON, WILLIAM HENRY, Clarksdale. M.D., Northwestern University Medical School, Chicago, Ill., 1924; interned Baptist Memorial Hospital, Memphis, Tenn.; Sergeant, U. S. Army, two years; Fellow of the American College of Surgeons; member of Southeastern Surgical Congress; president (past) of the Mississippi Hospital Association, two years; associate director of the Mississippi Hospital and Medical Service and member of the board of governors; president of the Mississippi Chapter of the American Cancer Society, two years; listed in Who's Who in the South and Southeast; died Dec. 4, 1960, aged 66.

EDWARDS, JOHN RICHARD, Leesburg. M.D., University of Tennessee, Memphis, 1901; practiced in Rankin County 62 years; died Jan. 1, 1961, aged 84.

EHLINGER, RANCIER BURT, Pass Christian. M.D., Tulane University School of Medicine, New Orleans, La., 1919; interned Charity Hospital, New Orleans; general surgery residency, Charity Hospital, New Orleans, one year; Lieutenant, U. S. Army, two years; member Texas and Louisiana medical societies; died Oct. 19, 1960, aged 67.

ELDREDGE, HARTWELL ALISON, Bay St. Louis. M.D., Baylor University College of Medicine, Houston, Texas, 1903; attended course in Ob-Gyn, Tulane University, New Orleans, La., 1943; Lieutenant, U. S. Army; emeritus member of MSMA; died Dec. 21, 1960, aged 79.

PODESTA, AUGUSTINE JOSEPH, Vicksburg. M.D., Vanderbilt University School of Medicine, Nashville, Tenn., 1916; interned U. S. Marine Hospital, New Orleans, La.; served as superintendent of the Mississippi State Hospital, now Kuhn Memorial Hospital, Vicksburg; died Dec. 21, 1960, aged 66.

Book Reviews

Obstetrics. From the original text by Joseph B. De Lee, M.D. (12th Edition). By J. P. Greenhill, M.D., Senior Attending Obstetrician and Gynecologist, The Michael Reese Hospital, with 23 other contributors. Cloth, 1098 pages with 1219 illustrations. Philadelphia: W. B. Saunders Company, 1960. $17.00.

Dr. Greenhill has extensively revised his latest edition of *Obstetrics*. Its format is that of its predecessors, with the book divided into two parts: I. The Physiology of Reproduction, Pregnancy, Labor, and the Puerperium, and II. The Pathology of Labor, Pregnancy, and the Puerperium.

The table of contents has been more conveniently arranged. Much new material has been added and entire chapters are now devoted to the physiology and biochemistry of the placenta, nutrition in pregnancy, pulmonary function and tuberculosis in pregnancy, otorhinologic problems in the mother and infant, endocrine disease of pregnancy, clinical aspects of the newborn, and perinatal brain injury with special reference to cerebral palsy.

The chapters on endocrine changes in normal pregnancy and toxemias have been expanded, and a completely new chapter, "Medicomoral Problems" is excellent. The sections on antepartum care and the puerperium in normal patients are exceedingly conservative for 1960.

This book has always been noteworthy for beautifully clear illustrations of technical procedures, and over 100 new illustrations have been added. For the first time the chapter on home delivery has been deleted, a reflection of the current 93.6 per cent incidence of hospital deliveries in the United States.

In a book so beautifully written it startles this reviewer to find Lugol's solution advocated as treatment for annoying tachycardia in pregnancy (page 374) and surely the recommendation of intraperitoneal sulfanilamide in surgery of infected puerperal patients (page 909) is a vestige from earlier editions. But this is niggling criticism of minutiae in a generally superb book that admirably accomplishes its purpose as an obstetrical text. It should be a valuable aid to medical students and house officers and offers much of interest to the obstetrical practitioner. The bibliography is splendid.

MARGARET P. VELLER, M.D.

Fundamentals of Chest Roentgenology. By Benjamin Felson, M.D., Professor and Director, Department of Radiology, University of Cincinnati College of Medicine. 301 pages. Philadelphia-London: W. B. Saunders Company, 1960. $10.00.

Proceeding from the axiom that if one knows the basic principles of a particular discipline, one can solve most of its problems, the author skillfully presents his own analysis of the fundamental approaches to roentgenological evaluation of the chest.

Contrary to some current opinions, a case is made for fluoroscopy with the conclusion that the possible benefit of appropriately indicated fluoroscopy far outweighs the possible hazard. Emphasis is placed on safety measures to be followed and the proper organization of procedure to get the most information with the least exposure. A brief discussion on radiographic methods touches on indications for supplementary views and procedures.

Chapters on localization of intrathoracic lesions, lobar and segmental variations, and pathology are outstanding and well worth careful study by anyone who undertakes to interpret chest radiographs. Other chapters cover analyses of the hili, intrapulmonary vessels, pleura, extra-pleural space and diaphragm. A section devoted to the author's evaluation of several special roentgenographic signs will be particularly interesting and helpful to the reader who only occasionally encounters them.

This volume is obviously the work of a gifted teacher, who possesses a wealth of experience and writing talent. Simplicity and brevity throughout make for easy, enjoyable reading and understanding. It is recommended for residents and practitioners, regardless of specialty, who encounter problems in chest roentgenology in their daily training or practice.

JAMES M. PACKER, M.D.

Domestic Journals

School Phobia: A Study in the Communication of Anxiety. Leon Eisenberg, M.D., Am. J. Psychiat. 114:712-718 (Feb.) 1958.

Dr. Eisenberg published this analysis some while ago, but it contains interesting statements about school phobia, a problem which is frequently brought to the attention of the physician in general practice. He noted that in eight years the incidence of such cases admitted to their clinic (Children's Service, Johns Hopkins) had more than doubled.

He states that school phobia might better be termed "separation phobia" for it reflects anxiety over leaving parents (usually the mother) rather than fear of attending school—no matter how the child may elaborate his symptoms on the surface as frank fear of school or the frequently expressed fear that nausea or syncope may occur in school.

He states that his experience shows that the child in the early grades of elementary school (where most referrals occur) should be returned to school quickly and not kept at home. The parents' status, their anxiety over the separation, the child, or their own relationship should be evaluated.

It should be stressed to the child that he is required to attend, and that it is not then whether or not he does return, but how and when. At first, if necessary, the child can spend the day in the principal's office, counselor's office, or with his mother in the school room, depending on the personalities involved. In any event, he must be in the school building at school time. Meanwhile the significant parent should be seen and permitted to talk over his or her feelings about the program, about the child, and other problems that may come up.

One should not be inveigled into sanctioning home teaching. This only further isolates the child and prevents normal psychological growth. The farther the child has gone in school, the harder it is to treat him. Ten elementary school children all returned to school on the above sort of program and panic was not precipitated in any child.

Oscar E. Hubbard, M.D.

CPC XIII

(Continued from page 60)

is sometimes demonstrated in the stomach but rarely. I would like to ask Dr. Henderson a question at this time. Is this lesion more radiolucent that would be indicative of a lipoma?"

Dr. Robert Henderson: "No, it is not more radiolucent. Along that line, we might say that a lipoma has to be of rather large size to appear as a radiolucency on a plain film of the abdomen. Lipomas are usually found in the colon."

Dr. Griffin: "Dr. Henderson, let me ask you one other question. We hear a great deal about the radiological appearance of a benign ulcer and a malignant ulcer in which the scar tissue in a benign ulcer contracts causing a pointing of rugal folds toward the ulcer, whereas this does not hold true with a malignant ulcer. I know that is not an infallible statement, but would you classify this ulcer as benign or malignant?"

Dr. Henderson: "I would classify this as an ulcer in which there are no folds radiating from it. An air fluid level within a gastric ulcer usually indicates a benign crater since adenocarcinomas of the stomach usually have a relatively broad base for the depth of the ulcer."

Dr. K. M. Heard: "Do you have any further comments about the x-ray?"

Dr. Henderson: "I think we can say that this ulcer appears to be eroding within the mass. It does not extend outside the wall of the stomach in contradistinction to the usual perforating peptic ulcer which usually erodes outside the wall (Figure 1)."

Dr. Griffin: "Would you say that this ulcer could possibly be more or less on a pedunculated stalk?"

Dr. Henderson: "There is no evidence of a stalk and it appears to be fixed on all films."

Dr. Griffin: "My diagnosis at this point will be limited to a connective tissue tumor of the stomach. As far as making a microscopical diagnosis, based on percentage I would say that this is a leiomyoma of the stomach which has undergone ulceration and from which the patient has bled. I believe that the lesion will be benign."

Dr. Heard: "At surgery a tumor mass was found high on the lesser curvature. This was removed by local excision (Figures 2, 3), and by frozen and permanent sections was found to represent a leiomyoma, as predicted by Dr. Griffin (Figures 4 and 5). A deep ulcer was present over the apex of the mucosal surface."

Final Diagnosis: Leiomyoma of stomach with ulceration and hemorrhage. ★★★

1190 North State Street

Dr. Pankratz Retires as Medical School Dean; Associates and Students Honor With Banquet

Dr. David S. Pankratz was honored with a dinner on Dec. 14 by the University Medical Center. UMC faculty and staff members, students, and alumni attended.

The director of the Medical Center since 1954, Dr. Pankratz has been associated with a new state neuropsychiatric unit in Memphis since the first of the year. He joined the University of Mississippi School of Medicine faculty in 1939 and became dean in 1945.



Dr. David Pankratz, standing center, who retired the first of the year as director of the University of Mississippi School of Medicine, is shown during a dinner in his honor. The dinner featured the presentation to the University Medical Center of a portrait of Dr. Pankratz, who will assume a medical post in Memphis. Shown seated are Mrs. Pankratz, left, and Mrs. O. W. Hyman. Standing from left are Dr. O. W. Hyman, vice president of the University of Tennessee in charge of medical activities; Dr. Pankratz, and Dr. B. S. Guyton, dean emeritus of the University of Mississippi School of Medicine.

In announcing his resignation, the 62-year-old medical educator explained that he is entering a new field in anticipation of mandatory retirement under the state law.

Speaker for the banquet was Dr. O. W. Hyman of Memphis, vice president of the University of Tennessee in charge of medical activities. Dr. John D. Williams, chancellor of the University of Mississippi, presided and Dr. Curtis Artz was in charge of arrangements.

Feature of the banquet was the presentation to the university of Dr. Pankratz's portrait painted by the noted Mississippi artist, Karl Wolfe. The portrait will be hung in the University Medical Center.

Closing Date for Scientific Exhibits Set

Last call for scientific exhibits for the 93rd Annual Session, Biloxi, May 9-11, 1961.

So says MSMA's Committee on Exhibits of the Council on Scientific Assembly, according to Dr. William E. Lotterhos, Jackson, chairman. Additionally, Council spokesmen stressed that available space will be limited in the Buena Vista, annual session headquarters hotel.

"The committee will meet during February to select exhibitors from among applicants," Dr. Lotterhos said. "First preference will be given members of the state medical association who will compete for the annual scientific gold medal award. Other applicants eligible to apply for space are organizations and agencies having a valid function in the health service field and out-of-state physicians desiring to present exhibits of scientific interest."

Located apart from the giant technical exhibit, the scientific booths will be sited in the main lobby and east lounge of the Buena Vista, Dr. Lotterhos said. Only registered members and official guests will be admitted to view the booths, since MSMA policy does not permit opening of exhibits to the general public.

The announcement added that interested applicants should file a letter of application by February 15 in order to receive consideration when the committee makes an initial screening. Those applicants receiving official application forms will be

in the final running for selection and assignment of booth space.

Letters of application should be addressed to the Council on Scientific Assembly, Mississippi State Medical Association, 735 Riverside Drive, Jackson. The subject of the exhibit, name of sponsor, and minimum space requirements should be stated, the announcement continued. Council rulings for scientific exhibits permit mention of pharmaceutical or medicinal products by generic name only. Booths must be attended during exhibits hours by sponsors or designated representatives who are responsible for erection and dismantling of the exhibit.

Tri-County Holds 54th Annual Meeting

The 54th annual meeting of the Tri-County Medical Society was held Dec. 13 in Brookhaven.

Guest speakers were Dr. Howard Suttle, executive secretary, Mississippi Industrial and Technological Commission; Dr. G. Swink Hicks, MSMA president; Dr. Lawrence Long, MSMA president-elect, and Dr. Charles R. Jenkins, MSMA vice president for the southern district.

During the business session, Dr. William M. Dabney, Crystal Springs, was named president of Tri-County for the coming year, and Dr. Aubrey V. Beacham, Magnolia, was elected secretary-treasurer.

Circuit Courses Held In Gulfport, Hattiesburg

The second series of University Medical Center Circuit Courses was held during January in Gulfport and Hattiesburg.

Planned so the practicing physician can attend postgraduate programs without leaving his patients, the circuit courses feature sessions on surgery, internal medicine, children's diseases, and obstetrics-gynecology.

Programs were held in Gulfport on Jan. 11, 19, 25, and Feb. 2, and in Hattiesburg on Jan. 12, 18, 26, and Feb. 1. A similar series will be offered in Meridian in March.

In their second year, the Circuit Courses are planned by the UMC Postgraduate Education Committee with the cooperation of the Mississippi State Medical Association and the Mississippi Academy of General Practice.

Fifteen hours of category I credit is granted by the academy for full attendance.

Insurance Affects Treatment, HIAA Says

The presence of health insurance may at times influence both the amount of hospital and medical treatment a patient receives and the level of charges made by a doctor, and this contributes to statistical problems in the medical expense insurance field, an insurance statistician said.

David Robbins, assistant director of statistical research for the Health Insurance Association of America, which has more than 260 member insurance companies, spoke at the recent annual meeting of the American Association for the Advancement of Science at New York's Hotel Roosevelt.

Mr. Robbins said one of the statistical problems in health insurance is presented by the "subjective nature of the risk," which is different than in other insurance programs.

"Illness is, in many ways, a relative term," he said. "It is often difficult to determine whether it exists, when it commenced, and when it terminates. Self-preservation is a normal urge and hence in life insurance the desire of the claimant is to avoid the event against which he has insured himself.

"Likewise, the natural desire of an individual is to avoid accidents and sickness. However, when illness does occur, the normal incentives motivating the insured may not operate in the interest of the insurer and the other policyholders."

Mr. Robbins said another area of statistical concern results from "lack of control over the frequency of claims." He declared:

"Averages in the medical insurance field are often twisted by the desire and mental attitude of the patient and by the philosophy of the attending physician. . .

"For example, under hospital insurance plans with a 120 day benefit, average duration of stay per admission was shown in one study to be 58 per cent greater than for plans with a 31 day benefit. Part of this difference is due to the limit of 31 days in such policies, but a large portion is undoubtedly due to the availability of the additional insurance in the 120 day contract."

He said other statistical problems are caused by rising medical costs and the development of adequate data. Hospital costs are rising about five per cent a year, he said, at a rate similar to other medical care items with the result that "expected claim costs, rather than being current, may be several years out of date."

Mr. Robbins said many of these problems will be solved but they will "probably be replaced by other needs and other problems" which will develop primarily "because of the dynamic nature of the medical care and health insurance movements in this country."

Code Commission to Hold Parley on Handicapped

Mississippi's second conference on handicapped children, cosponsored by the Children's Code Commission and the Nemours Foundation, will be conducted at Jackson, February 22-23. Heading the meet as conference and planning chairman is Dr. Blair E. Batson, Jackson, professor and chairman, department of pediatrics, University of Mississippi School of Medicine.

Commission and conference spokesmen said that four major objectives will be sought in the meeting. First will be to determine necessary cooperative activities required of all professions serving handicapped children to realize maximum benefits for each child. A second objective will be to determine methods by which each profession can develop a keen appreciation of what others are doing, thereby best serving the multiple needs of the handicapped group.



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"That doctor sure knew what you needed."

Conference representatives said the third goal was defining action necessary to secure sufficient personnel, facilities, and services for meeting needs with which the handicapped child may be found to face. Finally, the conclave will lend its support to development of a continuing coordinating body to improve lateral communication and interaction among individuals, formal groups, and agencies serving this field.

Six out-of-state speakers, four of whom are well-known physicians, will appear on the program. The other two participants are prominent in work with handicapped children. The speakers are:

Randolph Batson, M.D., Department of Pediatrics, Vanderbilt University, School of Medicine, Nashville, Tenn.

William P. Hurder, M.D., Associate Director of Mental Health, Southern Regional Education Board, Atlanta, Ga.

Darrel J. Mase, Ph.D., Coordinator, Florida Center of Clinical Services, University of Florida, Gainesville, Fla.

Joseph H. Reid, Executive Director, Child Welfare League of America, New York City, N. Y.

Raymond R. Rembolt, M.D., Director, University Hospital School for Handicapped Children, University of Iowa, Iowa City, Iowa.

Henry H. Work, M.D., Department of Psychiatry, School of Medicine, University of California Medical Center, Los Angeles, Calif.

East Mississippi Holds Scientific Program

The East Mississippi Medical Society held its annual scientific program on Dec. 8 in Meridian with 30 members and their wives attending.

During the business session, Dr. M. L. Flynt, Meridian, was inaugurated president. Dr. Jasper M. Blount, Philadelphia, was named president-elect; Dr. Hugh Rayner, Meridian, secretary-treasurer, and Dr. W. J. Slaughter, censor.

Three speakers presented papers as part of the scientific program. Dr. Norman Woody, Jr. of Corpus Christi, Texas, spoke on "Congenital Anomalies of the Gastrointestinal Tract," Dr. Fred Hunter of New Orleans, La., on "Management of Chronic Liver Disease," and Dr. Keith Reemtsma of New York City on "Surgical Management of Congenital Anomalies of the Gastrointestinal Tract" and "Surgical Management of Portal Hypertension."

Dr. C. G. Grulee, Jr., associate dean, Tulane

University School of Medicine, made the introductory remarks.

A special feature was the awarding of the Research Medal of the Southern Medical Association to Dr. Leslie V. Rush. The medal was given for Dr. Rush's research in the use of steel pins and nails in fracture cases. Dr. Guy T. Vise, Meridian, made the presentation.

MHA Announces 1961-62 Research Program

The Mississippi Heart Association is now receiving applications for its 1961-62 research program, according to Miss Lucile Little, executive director. Applications must be received on or before March 1, 1961.

The grants are made to non-profit institutions in direct support of a particular investigator for a specific program of research under his direction. Grants are awarded in support of research in the cardiovascular field or basic sciences related to it for periods of one to three years.

Applications will be reviewed by the Research Grants and Fellowships Committee of the MHA. Grants will be approved on or about April 1, and awards will be announced on July 1.

Further information and application forms may be secured from Miss Little, 145 East Amite Street, Jackson.

National Foundation Sums Aid to State

More than three-fourths of all March of Dimes funds contributed by Mississippians have been used in the state. This was the pre-Christmas statement of Edward F. Stegen, National Foundation press chief and director of medical relations.

Mr. Stegen said that more than 77 cents of every dollar from Mississippi has been put to use in aiding state patients and in research projects conducted by the University of Mississippi School of Medicine. Of the remaining 23 cents accruing to national headquarters of the giant voluntary health agency, a substantial amount has been returned to the state in shipments of poliomyelitis vaccine and immune gamma globulin. Other benefits, Mr. Stegen said, are realized in nationwide services conducted by the National Foundation.

The summary covers the period since the first March of Dimes was held in January, 1938, and compares the net total of funds raised in the state with amounts made available to Mississippi through September 30, 1960.

In this period, Mississippi chapters of the March of Dimes organization raised a net total of $5,902,439.76 at an average fund-raising cost of less than 6 per cent. Of this amount, $4,506,-116.88 has been available to the county chapters in carrying out their extensive patient aid programs, including advances of $2,013,677.38 from the national office to meet local emergency situations.

In addition, three grants totaling $26,660.70 have been made in support of research at the University of Mississippi School of Medicine.

Over and above the 77 per cent used by county chapters and for research at the University, the National Foundation has financed within the state projects such as the historic field trials which proved the effectiveness of the Salk vaccine, epidemiological studies and scholarship or fellowship grants to Mississippi residents. National headquarters' expenditures for the vaccine trials in Mississippi amounted to $28,291.92. In addition, the national office has sent into Mississippi $75,076.-74 worth of Salk vaccine and 133,120 cc's of gamma globulin in support of its polio prevention programs.

U. S. Hospital Use Falls to 1940 Level

The annual use of hospital care by the nation's population has declined to the 1940 level of 2.8 days per person, according to the Health Insurance Institute.

The average number of days each American spent in general and special hospitals, mental hospitals, and special tuberculosis hospitals was the same in 1959 as in 1940, down after a peak of 3.9 days a person in the wartime year of 1945, and an average of 3.1 days a person in 1951, 1952, and 1953.

Even though hospital admission rates were 75 per cent higher than 20 years ago, the days in hospital per person for the total population was the same for 1940 and 1959. During 1940 there were 74 admissions to general and special hospitals for each 1,000 persons in the population compared to 130 admissions in 1959.

The Institute attributed the reduction to advances in medical science, and said the cutdown played a key role in keeping the demand for hospital services within manageable bounds. If the average length of stay had remained at the 1940 level of 13.7 days through 1959, the rise in admissions would have produced 1,789 days in these hospitals for each 1,000 persons, some 43 per cent above the actual figure of 1,254 days.

Kintner Plans Kaput Under IRS Edict

Final regulations issued by the U. S. Internal Revenue Service for establishment of tax-deferred pension plans for physicians under the so-called Kintner association ruling are disappointing to doctors who hoped for concrete assistance in correcting existing tax inequities against them. MSMA spokesmen said that final IRS rulings required physicians' groups applying for retirement tax advantage to possess more corporate than non-corporate legal characteristics. The decision amounted to non-acquiescence on the part of the commissioner.

In the original Kintner and Galt cases, tax courts held that physicians, even though prohibited by state law from incorporating for the practice of medicine, could not be prevented from being taxed as a corporation when organized in an "association group" possessing corporate characteristics. It was on this tax star that many American physicians began hitching their tax-structure wagons only to find that the new regulations virtually prohibit qualification.

The new ruling states that an unincorporated organization shall not be classified as an "association" unless it has more corporate than non-corporate characteristics.

The extent to which corporate characteristics are legally present or absent will determine whether an organization of physicians, i.e., clinic or practice group, will get the nod from IRS as a partnership or an "association": continuity of life, centralization of management, limitation of liability for debts to organization property or legal lack of personal liability on the part of members, and free transferability of interests.

Mississippi State Medical Association officials have advised members to shy away from Kintner-type plans to provide tax-deferred, voluntary pension plans. In 1960, the association concluded an agreement with the $200 million Deposit Guaranty Bank of Jackson for a Keogh-type voluntary retirement program pending enactment of legislation by the the Congress. The bill, H.R. 10, was within minutes of passage but the senate failed to act in the closing days of the 86th Congress.



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"Operation too high? Well, have you thought of doing it yourself?"

AMA Launches Health Education Bulletin

Just in time for the new year comes the AMA's newest publication—a monthly bulletin entitled *Health Education Service for Schools and Colleges.*

Directed at teachers of health, the *Service* will operate on an experimental basis during 1961 with a selected list of instructors receiving the issues. The publication is sponsored by AMA through its Department of Health Education.

The bulletin's chief purpose is to provide teachers with authentic health news in concise form. Says the *Service:* "The vast amount of health information being published today makes it difficult to keep up with developments. Also, it is often hard to distinguish between fact and fallacy, science and pseudo-science."

Scientists in 11 States Get Tobacco-Health Study Grants

Seventeen research grants, totaling nearly $200,000 have just been awarded to scientists in 11 states for studies of tobacco use and health, Timothy V. Hartnett, chairman of the Tobacco Industry Research Committee announced.

The Committee has made 57 grants to scientists in 1960 for a total of nearly $800,000. All grants are made by the Scientific Advisory Board of independent doctors and research scientists. Some $4 million has been appropriated for research since the TIRC was first established.

Wilkinson-Amite Names Thornhill President

Dr. David Thornhill of Gloster was elected president of the Wilkinson-Amite Medical Society at a recent meeting of the organization. He succeeds Dr. Homer Ellis of Centreville.

Other officers named were Dr. S. E. Field, secretary, and Dr. R. J. Field, Jr., president-elect, both of Centreville. These officers also serve as officers of the active medical staff of the Field Memorial Community Hospital. Dr. Thornhill will serve as chief of staff.

Dr. Charles E. Catchings, Woodville, was named delegate to the state convention.

Guest speakers for the meeting included Dr. G. Swink Hicks of Natchez, MSMA president, and Dr. W. D. Batson of Brookhaven, who presented a paper on "Tumors of the Ovary."

ACS Accredits U.S. Canada Cancer Programs

The American College of Surgeons has approved 868 cancer programs in the United States, its territorial possessions, and Canada. Each has fulfilled or exceeded minimal standards set by the ACS Board of Regents in the *Manual for Registries and Cancer Clinical Activities*. Seven programs in four Mississippi cities were among those approved.

The announcement was made by the ACS Department of Professional Services and Accreditation concurrently with publication of the 1961 manual. Cancer programs categories include specialized hospitals, consultation and treatment services utilizing a given hospital professional staff, and cancer consultation services defined as an organized group of physicians. All Mississippi's cancer activities are in the second category. Receiving approval are:

Columbus: Doster Hospital.

Greenville: Gamble Brothers and Archer Clinic.

Jackson: Central Tumor Clinic, University of Mississippi Hospital, and the Veterans Administration Hospital.

Vicksburg: Mercy Hospital-Street Memorial and the Vicksburg Hospital.

Financial aid for the College's accreditation program in cancer control is received from the National Cancer Institute of the United States Public Health Service and the American Cancer Society. This assistance supplements funds appropriated by the College from dues and organizational resources to conduct the international program.

Copies of the 1961 manual may be obtained from ACS headquarters in Chicago and the listing of approved institutions appears in a recent ACS Bulletin.

Ob-Gyn Board Sets Part II Exams

The American Board of Obstetrics and Gynecology has announced that the next scheduled examinations (Part II), oral and clinical, for all candidates, will be conducted April 8-15 at the Edgewater Beach Hotel, Chicago, Ill. The examinations will be conducted by the entire board.

Formal notice of the exact time of each candidate's examination will be sent in advance. Candidates who participated in the Part I examinations will be notified of their eligibility for the Part II examinations as soon as possible.

All candidates, eligible for the Part II Examinations, who have applied for the first time in 1960, will be required to submit a duplicate list of the hospital admissions as contained in their application.



"I know you're trying, Doctor, but I still feel depressed."

Latest Safety Move: Operation Seat Belt

With the auto accident rate climbing higher each year, much attention is being focused on the seat belt. Reasons: The National Safety Council estimates 5,000 to 6,000 lives could be saved each year if every family would install seat belts. An automotive crash injury research study at Cornell also indicates that seat belts could reduce severity of injuries by 60 per cent.

At present only 1.5 per cent of U. S. cars have belts. However, auto accessory chain stores report a sudden and substantial spurt in consumer use for passenger cars—especially following holiday weekends when accident tolls make nationwide headlines. Say the stores: Women (mostly mothers) are responsible for eight out of 10 current belt purchases.

On a national level, a special Seat Belt Symposium was recently conducted by the Federal Safety Council. Result: A government-wide program to put belts on all official cars.

In Mississippi, State Board of Health Executive Officer Dr. A. L. Gray has asked that all state public health workers install seat belts. The request came after six Holmes County public health employees sustained serious injuries in an auto accident.

While no Detroit manufacturers are yet building in belts as standard equipment, all are preparing new cars for dealer installation of belts as optional equipment. Belts cost less when installed by the factory, but only 3 per cent of new cars are going out so equipped. Cost of dealer installation: $10 to $12 per belt; $2 to $5 for installation.

'Medicine at Work' Reactivated by PMA

A new medical periodical from which all American opinion leaders can secure timely information has been initiated by the Pharmaceutical Manufacturers Association. Tagged "Medicine at Work," the publication has been described as part newsletter, part scientific report, and part fact-sheet. An eight page format is employed in the publication.

Not a new idea, MAW was first introduced to physician readers as a feature section of the *Journal of the American Medical Association.* Its originator and editor was Milton Golin, nationally known medical science writer and editor. The feature was discontinued when Dr. Austin Smith resigned as JAMA editor to accept the full time presidency of PMA. Mr. Golin is now a staff associate of Dr. Smith in addition to new duties as editor of *Medicolegal Digest.*

Commenting on the new project, Dr. Smith said that the original "Medicine at Work" ". . . offered a change of reader pace from clinical papers, an informal approach to describe how individuals and organizations join with physicians to tackle important health matters."

As measured by audience and reprint response from physicians, mass circulation publications, medical schools, legislators, and others, Dr. Smith continued, MAW was achieving its purpose.

The new monthly publication will center around specific environmental health problems in city and rural life, alcoholism, individual benefits of medicine-religion rapport, lifesaving drama in natural disasters, traffic accidents as medical problems, new concepts in medical facilities, aviation and space medicine, reports of the non-biological sciences of medical interest, progress in the field of aging, socioeconomics, doctors as citizens and community leaders, and medical research.

Mr. Golin is heading the new project under PMA aegis. The publication is being furnished recipients without charge but sponsors have asked ". . . payment in the currency of critical comment."

Cardiac Resuscitation Institute Scheduled

The American Heart Association is planning a Teaching Institute on Closed Chest Cardiac Resuscitation for March 14, 1961, in Atlanta, Ga.

Physicians from the Johns Hopkins University School of Medicine will conduct the institute with attendance limited to 50 physicians per session. Two three-hour sessions are scheduled—one in the morning and one in the afternoon.

Information may be secured from the Mississippi Heart Association, 145 East Amite Street, Jackson.

Davis, Wesson Head Northeast Society

Dr. Frank M. Davis, Corinth, was recently named president of the Northeast Mississippi Medical Society. He will take office in May.

Dr. Tom Wesson of Tupelo was named secretary-treasurer. Dr. Davis is also MSMA vice-president for the northern district.

Public Health Service Awards Research Grants

The Public Health Service has announced the award of 50 new grants totaling $809,254 for basic research in genetics, human embryology, and cell biology.

The new grants bring to nearly $5 million the funds allocated by the Division of General Medical Sciences of the National Institutes of Health for research in these areas since the division was organized in July 1958.

The awards, made to 37 institutions in 19 states (and one award to Dr. H. G. Lundegardh of Sweden) were approved by Surgeon General Leroy E. Burney on the basis of recommendations made by the National Advisory Health Council in its June 1960 meetings.

Research is being supported in such areas as biochemical investigation of homeostatic cell cultures; study of cell surface structure and membrane kinetics; study of gene structure and function; genetic factors in human development; and immunological studies in normal and abnormal pregnancy.

More results are emerging from these fields, in part because of the recent application to the biological sciences of new biophysical knowledge.

These grants are part of a continuing program by the Division of General Medical Sciences to encourage and expand research in the fundamental chemical processes governing cellular function and reproduction.

Desoto Society Names McIntosh, Seeks Hospital

The De Soto County Medical Society has re-elected Dr. Barry McIntosh of Hernando president and Dr. L. L. Minor of Walls secretary-treasurer.

In other action at the December meeting, the organization voted to support necessary enabling legislation at the next session of the Mississippi Legislature to permit De Soto County to withdraw from participation in the North Mississippi Hospital at Holly Springs.

Dr. McIntosh, who heads a move to establish a DeSoto County Hospital, was named to head the society for a third successive term.

The vote seeking DeSoto County's withdrawal from participation in the North Mississippi Hospital was unanimous. Such a move would be necessary before a hospital for De Soto County could be approved.

PERSONALS

BLAIR E. BATSON, Jackson, has been elected to membership in the new specialty Section on Child Development of the American Academy of Pediatrics.

OSCAR WEIR CONNER, III, Jackson, has been elected a Fellow of the American Academy of Pediatrics. Dr. Conner is one of 275 new members voted into the association.

JAMES FOSTER has been named president of the Biloxi Hospital medical staff. He succeeds Dr. Harry Schmidt. Other officers elected are Dr. Max Curry, chief of staff; Dr. S. H. Hackman, vice president; Dr. James Waddell, secretary-treasurer; Dr. C. E. Easterly, chief of surgery; Dr. Edwin Chanton, chief of medicine; Dr. Frank Gruich, chief of obstetrics and gynecology, and Dr. Steve Sekul, chief of pediatrics.

EDGAR JOHNSON, JR. was elected president of the Hattiesburg Exchange Club at a recent meeting. Dr. Prentice Walker was named to the board of directors.

DAVID S. PANKRATZ, who resigned the first of the year as director of the University Medical Center, was named one of the three winners of the 1960 First Federal Foundation Awards for Distinguished Service to Mississippi. The awards were given on Jan. 21. Dr. Pankratz was also recently named "Pride of Northside" by the *Northside Reporter*. Said the *Reporter*: "Dr. Pankratz was a guiding force in the successful attempt to establish a four-year medical school and to construct the Medical Center in Jackson. Under his leadership, this relatively new medical unit of the University of Mississippi has gained national and international attention for research accomplishments."

A. STREET has been named chief of staff of the Mercy Hospital-Street Memorial for 1961. Other officers include Herman Kellum, president; James Kiely, vice president, and Tom Mitchell, secretary. Department heads are Lucian Ferris, medical; George Martin, surgical; Tom Mitchell, general practice, and Richmond Sharbrough, special services.

CHARLTON R. VINCENT, Laurel, has been elected a Fellow of the American College of Obstetrics and Gynecology.

JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION
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ORIGINAL PAPERS

Myasthenic Crisis Following Anesthesia And Thymectomy

JOHN A. MCLEOD, III, M.D., THOMAS V. STANLEY, JR., M.D.,
and LEONARD W. FABIAN, M.D.
Jackson, Mississippi

Myasthenia gravis, a chronic disease of uncertain etiology, is of particular interest to anesthesiologists because the muscular responses of the myasthenic and the partially curarized patient are strikingly similar. The authors discuss the probability of a causal relationship between myasthenia gravis and thymoma, and list possible basic defects in the disease. Emphasis is placed on the careful selection of anesthetics for patients with myasthenia gravis. A case history is presented of a latent myasthenic with thymoma with resultant myasthenic crisis under general anesthesia and surgical stress.

MYASTHENIA GRAVIS is a chronic disease of uncertain etiology, characterized by its tendency to spontaneous remission and exacerbation, and is primarily a disease of muscles. Most often affected are those of the face, the masseters, the muscles of deglutition and speaking, and the muscles of the eyes and eyelids although it may involve any group of muscles. Cranial nerve involvement is practically always present, especially as manifested by ocular ptosis, dysphagia, and easy fatigability of the masseter muscles.

Physical examination reveals little evidence of atrophy or reflex change. The most reliable feature of the clinical history concerns the onset of profound weakness following exercise but a return of normal muscle strength after a period of rest. In the more serious cases, muscle groups more gravely involved may not regain strength, even following prolonged rest.

Myasthenia gravis complicates surgical diseases more often than is realized clinically and has for many years been a disease of particular interest to pharmacologists and anesthesiologists, since the muscular responses of myasthenics and that of the partially curarized patient are strikingly similar. Likewise, anesthesiologists are especially interested in the study of this disease in that there is general agreement supported by experimental evidence that one type of anesthesia is better than another for these patients.

Although the physiologic role of the thymus in normal and abnormal conditions such as myasthenia gravis has never been determined, Wilson and Wilson[1] in 1955 produced a potent extract from thymic glands of myasthenic patients which in the laboratory resembled the nerve blocks ordinarily obtained with tubocurarine or decamethonium. However, these thymic extracts neither pro-

From the Department of Anesthesiology and the Department of Surgery, University of Mississippi School of Medicine.

duce the characteristic features of myasthenia gravis nor are the effects reversible by neostigmine. Nevertheless, the studies of Wilson and Wilson do suggest that if the curare-like substance is released over a prolonged period of time, it may produce irreversible changes near or at the neuromuscular junction.

POSSIBLE RELATIONSHIP

While the causal relationship of myasthenia gravis and thymoma has never been clearly established, the coexistence of these two conditions in a significant number of cases has long been known. In patients with myasthenia gravis, the incidence of thymoma has been reported to be as low as 15 per cent[2, 3] and as high as 30 per cent.[4, 5] Conversely, it has been reported that approximately 75 per cent of the patients with thymoma show symptoms of myasthenia gravis.[6] With these figures in mind, it is obvious that the association of myasthenia gravis with thymoma cannot be attributed to chance alone, even though some authorities think that both the thymoma and the myasthenia may be the result of a common etiologic factor. In the past it was thought that thymic tumors associated with myasthenia gravis were benign, but more recently there have been numerous reports of the invasive character of these tumors.[6, 7]

Theoretically, impairment of the neuromuscular junction can be induced in a variety of ways, with each of the following having been suggested at one time or another as the basic defect in myasthenia gravis: 1. decreased release of acetylcholine, 2. competition with acetylcholine by a "curariform" substance for end-plate receptors, 3. hyperactivity of cholinesterase, 4. excess of acetylcholine, and 5. aberrant response or condition of muscle end-plate.

TYPES OF NEUROMUSCULAR BLOCKADE[8]

1. Deficiency block
 a. calcium deficiency
 b. botulinus toxin
 c. procaine
2. Nondepolarizing block
 a. d-tubocurarine
 b. Laudolissin
 c. Mytolon
 d. Gallamine
3. Depolarizing block
 a. decamethonium
 b. succinylcholine
4. Dual block
 a. decamethonium — in myasthenics and occasionally in normal people.

In consideration of an anesthetic for use in myasthenics, the following properties are ideal:[9] 1. nonirritating to the airway (because of troublesome secretions), 2. potent (to obviate the need for muscle relaxants), 3. lack of curariform effect, 4. freedom from dangerous side-effects (myasthenics tolerate additional stress poorly), 5. rapid elimination (to minimize postoperative respiratory depression), and 6. a low incidence of postoperative nausea and vomiting (so that oral Prostigmin may be quickly resumed).

Any condition which is debilitating to muscle or which weakens neuromuscular conduction enhances the blocking effect of anesthetics. Volatile or injected anesthetics produce muscular relaxation both from depression of central activity as well as from peripheral actions. The most active is ether, although both ether and chloroform have neuromuscular blocking properties similar to curare. The gases are an exception to this effect, though, and most anesthesiologists favor cyclopropane as the anesthetic of choice for major surgery in myasthenia gravis.[8, 10] This choice stems from the properties of being rapidly eliminated postoperatively, capable of producing all levels of anesthesia without supplementation, and that almost any procedure can be carried out satisfactorily with endotracheal cyclopropane and oxygen in the absence of relaxants.

MUSCLE RELAXANTS

With the possible exception of succinylcholine, the muscle relaxants are strongly contraindicated in patients with myasthenia gravis because of the intense sustained effect these agents produce in conjunction with this disease. It should be borne in mind that the need for these agents will seldom arise, since atony is so characteristic of the disease. Also, when administering succinylcholine to the myasthenic patient, one must bear in mind the possibility of two-stage hydrolysis associated with an accumulation of succinylmonocholine. This compound is slowly dissipated and is capable of producing weak neuromuscular blockage.

If there is any question of possible electrolyte imbalance, serum potassium determination should be performed, since hypokalemia aggravates myasthenia. Another fact to bear in mind is that quinine will likewise aggravate the conduction defect in myasthenics.[8]

In view of recent pathological studies noting cardiac lesions in autopsy specimens of known myasthenics,[11] it is well to have a preoperative electrocardiogram and cardiac evaluation.

Acute respiratory infections of any degree contraindicate all but the most urgent surgery, and broad-spectrum antibiotics are indicated if such intervention is necessary.

Preoperative medication should be on the ultraconservative side, with avoidance of morphine and

the barbiturates because of an apparently lowered tolerance. Meperidine in half the usual dose should be adequate. Female myasthenics show cyclic variation and tolerate surgical stress best post-menstrually.

Procedures below the umbilicus may be performed satisfactorily under spinal analgesia with little danger to the myasthenic patient, making certain, of course, that the level does not rise high enough to prevent adequate pulmonary ventilation.

Some of the problems which may arise in the management of these patients are illustrated in the following case presentation.

CASE REPORT

M. B., History No. 59, 741, University Medical Center, Jackson, Miss. This 49-year-old white male was first admitted to the University Hospital on March 19, 1960, with a chief complaint of "weakness. . . ." He related the onset of his illness to a fall from a street sweeper in June 1959, at which time he experienced pain in his right arm and leg, plus a vague, generalized weakness. He continued working for another month before having to quit because of weakness and progressive malaise. The episodes of weakness were usually worse in the afternoon. His symptoms persisted and progressed until he became unable to climb steps and could only walk short distances.

Physical examination on admission revealed a well-developed, well-nourished, middle-aged white male in no acute distress, with a questionable ptosis of both eyelids. Neurologic examination revealed that the cranial nerves were intact and functioning normally and that he walked with a faltering gait which was not wide-based or steppage in type. There were no pathologic reflexes, and deep tendon reflexes were absent. Roentgenograms of the chest, including fluoroscopy, revealed an anterior and superior mediastinal, nonpulsating mass impinging on the esophagus posteriorly. The impression was diffuse CNS disease versus myasthenia gravis with mediastinal tumor. Muscle function studies revealed some generalized weakness which was most pronounced in the lower extremities. Bronchoscopy and right scalene node biopsy did not yield any additional information.

Because of the muscular weakness, he was placed on neostigmine bromide 15 mg. orally every six hours. The patient improved subjectively on neostigmine therapy, but no apparent objective changes were noted. The patient was discharged on April 7, 1960, being scheduled for readmission to the surgical service at a later date.

He was readmitted to the University Hospital on May 7, 1960, where a routine preoperative work-up yielded no additional findings. He was scheduled for an exploratory right thoracotomy on May 13, 1960. On the day of operation the patient was given Demerol 50 mg. and atropine 0.4 mg. intramuscularly one hour prior to induction time, and anesthesia was induced with Surital 220 mg. intravenously supplemented by N_2O, cyclopropane and Fluothane in a partial rebreathing anesthetic system. Succinylcholine 40 mg. was administered intravenously for intubation, with insertion of a No. 40F endotracheal tube. The patient was maintained on O_2, N_2O and Fluothane (4 liter partial rebreathing circle flow), plus 240 cc. of 0.1 per cent succinylcholine "drip" during a three hour and 40 minute procedure. An exploratory right thoracotomy was performed utilizing a standard posterolateral thoracotomy incision in the left lateral position. A lobulated tumor mass was found posterior to the superior vena cava and anterior to the trachea, depressing the azygos vein inferiorly. Following division of the azygos vein, the tumor was excised completely. Frozen section revealed the tumor to be a thymoma of the reticulum cell type.

Following closure of the thoracotomy incision, the patient did not resume adequate spontaneous respiration for approximately two and one-half hours, requiring assisted respiration during this interval of time, although he appeared to be awake most of this period.

ETIOLOGIC FACTORS

In evaluating the possible etiologic factors involved in the production of prolonged respiratory depression in the postanesthetic period, a particularly confusing picture was presented in this case. Although the existence of a myasthenic crisis was strongly considered, the possibility of a prolonged action of succinylcholine also existed. The latter contingency precluded the administration of a cholinergic drug such as Tensilon or Prostigmin since these compounds tend to enhance the neuromuscular block produced by succinylcholine.

Other etiologic factors to be considered included hypocapnea due to hyperventilation during the anesthetic procedure, the presence of circulating succinylmonocholine or the possibility that Fluothane might enhance the neuromuscular blocking effect associated with myasthenia gravis.

Since no emergency existed so long as assisted or controlled respiration was maintained by use of a Bennett respirator, a decision was made to avoid the use of cholinergic drugs for a while in order to observe for the return of spontaneous

respiration. After approximately one hour, no improvement in spontaneous respiratory effort had been noted and no muscular effort had occurred.

At this time 2 mg. of Tensilon was administered intravenously. In a matter of seconds there was a dramatic return of muscle function and adequate spontaneous respiration. These parameters remained functionally normal without further administration of Tensilon.

In order to maintain the adequacy of neuromuscular function, Prostigmin 1 mg., and atropine 0.4 mg. were administered intramuscularly. The patient made an uneventful recovery and was discharged from the hospital on the 11th postoperative day.

A maintenance oral dose of neostigmine bromide 15 mg. every six hours was prescribed during and after his hospitalization. He is being followed in the outpatient clinic and continues maintenance therapy but with little objective improvement over that noted on his preoperative visits.

SUMMARY

Myasthenia gravis is a chronic disease of uncertain etiology, characterized by its tendency to spontaneous remission and exacerbation, and is primarily a disease of muscles. It is a disease of particular interest to anesthesiologists in that the muscular responses of the myasthenic and that of the partially curarized patient are strikingly similar.

A case history of latent myasthenia gravis with thymoma is presented, with resultant myasthenic crisis under general anesthesia and surgical stress.

Emphasis is placed on the necessity for diagnosis and preoperative preparation of patients with known or suspected myasthenia gravis, who are to undergo anesthesia and surgery. Special attention should be devoted to the selection of anesthesia for these patients, and special care in the use of muscle relaxants. ★★★

2500 North State Street

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AIM FOR THE DOC

Three stores in a well-known Southern town have got this advertising business down pat. Located in the same block with a hospital, they vie for the doctors' trade. The first, a shoe store, carries this sign: "Physician, heel thyself." The second, a liquor dealer, asks: "Dry, Doc?" and the third, a drug store, acclaims itself "The House of Pill Repute."

Cancer Therapy Combinations: A Case Report

LAWRENCE W. LONG, M.D.
Jackson, Mississippi

Recent experiments indicate that colchicine used with nitrogen mustard and x-ray therapy often leads to regression in cancer cases unaided by chemical and radiation therapy alone. Colchicine, an old drug used in the treatment of gout, appears to hold cells in the metaphase of mitosis, thus rendering them more vulnerable. The author discusses the phenomenon and presents a case report.

IN THE PAST FEW YEARS there has been some research work done on the use of colchicine, an old drug used in the treatment of gout. It has been noted that this drug has the faculty of holding cells in the metaphase of mitosis. Moore *et al.* at Strong Memorial Research Center in Rochester, N. Y., told me of their use of the drug in combination with Mustargen and x-ray therapy at the same time. I was informed in Oct., 1960, at the San Francisco meeting of the American College of Surgeons and felt that I had an ideal case on which to try the combination.

CASE REPORT

Mr. L. W. S., a white male, married, age 44, came to me March 10, 1959, with an apparent lipoma on the back just below the tip of the left scapula. It was soft, movable, unattached to the skin. It was removed under local anesthesia and the pathologist reported that the one inch in diameter, soft, round mass was a very anaplastic fibrosarcoma. On March 17, 1959, x-ray of his chest (Fig. 1) was clear and a block dissection of all tissue down to the ribs for an area 12″ x 12″ was removed and no residual tumor was found. On April 13, 1959, he was started on 2,000 roentgens of cross fire x-ray therapy over this area and he was re-checked one month later and found clear.

Feb. 20, 1960, about 11 months later, he came to me with a local recurrence in the original site and it was removed under local anesthesia and found to be the same tumor histologically. He was seen again on May 14, 1960, because of pain in his chest and x-ray of same (Fig. 2) revealed a partial pneumothorax, with evidence of perihilar metastatic lesions. A complete blood count was done and found to be in normal limits, and he was given 8 mg. Mustargen intravenously each day for four days (May 14, 15, 16 and 17).

June 15, 1960, he reported again for x-ray of his chest as per Figure 3 with some increase in the size of the lesions around the hilum. July 6 he was again given Mustargen 8 mg. daily for four days on July 6, 7, 8 and 9. He then reported back for examination on Aug. 2, 1960, when another x-ray was made showing a minimum increase in the size of the lesions. He was then given the third series of Mustargen of 8 mg. daily for four days on Aug. 17, 18, 19 and 20, and he reported a painful tumor mass of the size of a lime in the calf of the left leg and he was given 2,000 roentgens of x-ray therapy over the area, in cross fire, at that time.

Sept. 17, 1960, he reported for x-ray of his chest and blood count, and it was noted as per Figure 4 that there was an increase in the growth of the tumors in both lung fields and he was given the fourth series of Mustargen in the same dosage as previously (8 mg. daily for four days).

Upon my return from the San Francisco meeting of the American College of Surgeons, I had him report for examination with the following results as shown by x-ray of his chest in Figure 5, in which the rapid growth of the metastatic tumors is noted.

On Oct. 13, 1960, he was given cochicine gr. 1/60 four times a day, Mustargen 8 mg. in the

From the Department of Surgery, Mississippi Baptist Hospital.
Read before the regular monthly meeting, Central Medical Society, Jackson, January 3, 1961.

vein, and x-ray therapy, this being repeated every day for four days. Diarrhea resulted in the use of colchicine and the dosage was reduced, to gr.



Figure 1. (Left) March 17, 1959: Lung fields clear at time of block dissection. Figure 2. (Right) May 14, 1960: First evidence of lung metastasis.

1/120 four times a day which proved to be his maintenance dose which he is still on. He was

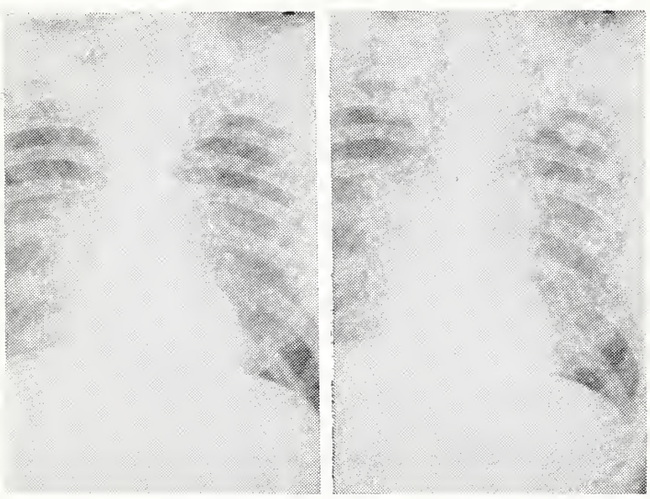


Figure 3. (Left) June 15, 1960: Some increase in size of metastasis. Figure 4. (Right) Sept. 17, 1960: Further increase in size of lesions after mustard and x-ray therapy.

given a total of 750 roentgens of x-ray therapy front and back over two portals each.

On Dec. 15 I had him report for a re-check with the results shown in the cut of the film of the chest in Figure 6 showing a marked regression in the size of the metastatic tumors.

The patient had adequate treatment with x-ray therapy, four series of Mustargen (nitrogen mustard), 32 mg. each series for a total of 128 mg., but no regression of the progress of the disease was noted until colchicine, nitrogen mustard, and x-ray therapy were all given together, then a melting process was noted in the metastatic lesions of the lungs.

CONCLUSIONS

It is admitted that one swallow does not make a summer, but Dr. Moore of Rochester, N. Y. and others have noted this phenomenon when colchicine has been added to the chemical and x-ray therapy of hopeless cancer cases with metas-

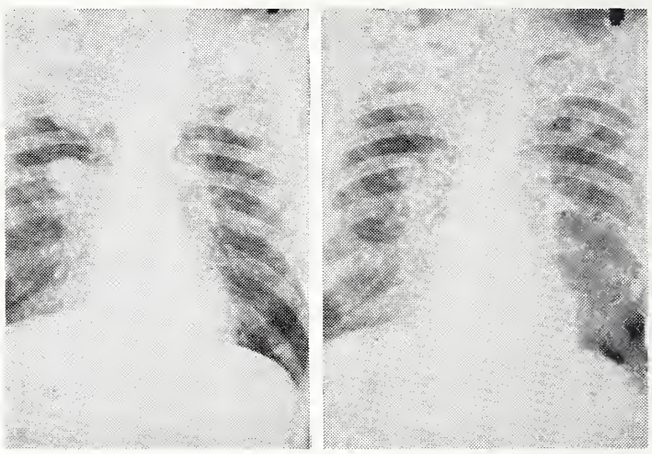


Figure 5. (Left) Oct. 29, 1960: Increase in size of lesions at onset of colchicine, mustard, and x-ray therapy combined. Figure 6. (Right) Dec. 15, 1960: Approximately six weeks after beginning therapy of a combined nature as described in text of case report.

tasis to the lungs. We are continuing our treatment in this manner in other cases which we hope to report later. If cells that divide rapidly can be held in the metaphase so that they do not mature, then the chemical and radiation therapy will have a better chance to do their work and destroy these cells before maturity. ★★★

775 North State Street

METERED MORTEM

There was a young man from Hong Kong,
Who suffered an ache for quite long,
Said his doctor, "Cheer up,
"If it doesn't clear up,
"Autopsy will show what was wrong."

—Betty Miller

The Present Status of Smoking And Cancer of the Lungs

GUY T. VISE, M.D.
Meridian, Mississippi

When history looks back at the 20th century, the great issues of the day will stand out in bold relief. Included will be the conflict of communism and capitalism, the use of atomic energy, and, quite possibly, the question of a causal relationship between smoking and lung cancer. The author discusses some of the current opinions on the subject and presents his conclusions.

DOES SMOKING REALLY have a casual relation to cancer of the lung? If so, how, and to what extent? If this is a problem—what is the solution to it? These are the questions to be considered in this paper.

The world-wide use of tobacco is rapidly spreading due to improved methods of communication, modern advertising skill, the more effective use of public relations experts, radio, and television—not to mention singing commercials. Every three-year-old child now knows that "Winstons taste good—like a cigarette should" and all nice penguins say "Smoke cool, smoke cool." Yes, the tobacco industry is expert in the field of "brain-washing" and "conditioned reflex action." They use well-established scientific and psychological facts to be more effective in the sale and promotion of their products.

The July 25, 1960 issue of *Newsweek* magazine reported: Sir Duncan Oppenheim, 55-year-old chairman of the board of the British American Tobacco Company, has a new definition for research which the tobacco companies are doing to combat the fears about cancer resulting from smoking. "One upmanship" is the term he uses—and the tobacco companies must stay "one up" on all the facts of scientific research. To stay "one up" on Sir Duncan will require considerable effort by groups interested in the health of mankind.

King James I of England condemned smoking as "loathsome to the eye, hateful to the nose, harmful to the brain and dangerous to the lung" —did he know about lung cancer?

President Dwight David Eisenhower, after his severe illness, had this to say, "I was a very heavy smoker and was asked to be more moderate about it. But for me, it was easier to stop. If a person quits pitying himself about it, he won't find it nearly so bad to quit smoking as he thinks he will."

Read before the American Cancer Society, Jackson, September 8, 1960.

Past-President Harry S. Truman remarked that "Columbus brought syphilis to the Indians—and they gave him tobacco. It is doubtful which is the worse."

One person out of every eight-10 people who smoke a pack of cigarettes a day will die of lung cancer. If you smoke one pack of cigarettes a day, you will get each year 27 ounces of carcinogenic tar in your lungs. If you smoke twice as fast, you will get 10 times as much nicotine and tars in your body—not just twice as much.

Cigarettes cause more cancer of the lungs, pipes cause more cancers of the lips, cigars cause more cancers of the tongue, chewing tobacco and snuff cause more cancers of the mucous membranes. Pay your money, take your choice, and grow your cancers where you wish.

The weight of evidence is so heavy that the Surgeon-General of the United States Health Department, Dr. Leroy E. Burney, has issued a statement linking smoking as a causative factor in the high incidence of cancer of the lung. Similar statements have come from the London Department of Health and the American Cancer Society.

Various methods for the control of tobacco have been used. Pope Urban VIII issued a Papal Bulletin ordering immediate excommunication of anyone caught smoking on church property. In Turkey, under the reign of Murad IV, people

were beheaded or tortured to death if caught smoking. The tobacco industry has "honored" this terrorizer by naming a brand of cigarette for him—Murads. In the early 20th century, the sale of cigarettes was illegal in 10 states—Arkansas, Idaho, Indiana, Iowa, Kansas, Minnesota, Nebraska, North Dakota, South Dakota, and Oklahoma. In 1937, it was still a misdemeanor to smoke in public places in North Dakota.

Taxation has been tried—in fact, the huge taxes received from tobacco may be one cause for government neglect. Education is probably the wisest course in combating any possible harmful effects of tobacco. This is the course which is being pursued by the American Cancer Society; it is the course that the medical profession is following.

HISTORY

Tobacco was introduced to the Spaniards by Columbus and later by Cortez. Sir Walter Raleigh introduced it to the English, and within a very short time its use spread throughout the entire world. Some retributionists have stated that it is the curse placed on the world for robbing the Indians of their native lands of North and South America.

TOBACCO INGREDIENTS

What makes tobacco *tobacco* and not just another weed is the alkaloid nicotine. Nicotine is a white crystalline substance more deadly, milligram for milligram, than cyanide. The name, nicotine, was given it in honor of Prince Jean Nicot, a Frenchman, who introduced the pleasure of tobacco to Catherine d'Medeci. The other chief ingredient of tobacco is tars, or hydrocarbons. About 10 have already been discovered which have carcinogenic activity—the ability to produce cancer in susceptible animals. The aromatic hydrocarbons, or tars, give tobacco its flavor. Ninety per cent of these aromatic tars are retained in the lung when cigarette smoke is inhaled and only 10 per cent are present in the exhaled smoke. This retention of the tars is the key note in the supposed casual relationship of cigarette smoking to lung cancer. Other ingredients of tobacco smoke are arsenic and carbon monoxide, along with many other yet unknown substances.

Tobacco is a poisonous weed. Uses of tobacco at the present time may be divided into two main categories—pleasure and industrial poisons. The pleasure uses of tobacco are snuff, chewing tobacco, pipe tobacco, cigars, and cigarettes. Industrially, tobacco is used as an insecticide and poison. It is very useful in keeping lawns free of insects. When I was a child, we used snuff to control chicken mites and tobacco leaves under the hens' nests for protection during hatching season. Tobacco leaves about the house gave results when we had no pest control companies.

HISTORY OF LUNG CANCER

Cancer of the lung was a fairly rare disease for years. In 1930, the death rate was 3.8 persons per 100,000. In 1956, the rate had jumped to 31 per 100,000, with 29,000 deaths in the United States in 1956 from cancer of the lung. There have been many improvements in diagnosis of cancer of the lung in recent years, such as improved x-ray technic, better trained physicians, and the discovery of antibiotics and chemotherapeutic agents that prevent death from pulmonary infections and tuberculosis. These patients live to develop cancer, or stay alive until it can be diagnosed. The Pap smear technique, discovered by Dr. George Papanicolaou of Cornell University, is useful in diagnosing cancer of the lung. Opponents of the theory of casual relationship between smoking and lung cancer say that the increase of lung cancer may be statistical instead of actual.

CAUSE THEORIES

Three theories of cancer causes have received much attention:

(1) mutation or heredity
(2) virus
(3) cell anoxia

The mutation theory attributes cancer to changes in the genes—the nucleic acid is different, or changed, or muted. The virus theory was first presented in 1910 by Dr. Peyton Rous when he showed that sarcoma could be transmitted by cell free extract. The cell anoxia theory was developed by Dr. Otto Warburg, a German biochemist and Nobel prize winner, who showed cancer was related to poor respiration of each cell and that too much lactic acid accumulated about cancer cells. Regardless of the cause of cancer, there are other variants which effect its activity and growth, such as hormones, diet, air pollution, climate, and tobacco. Wise control of these variants is a major health problem. The spotlight is on cigarette smoking at the present time.

TYPES OF STUDIES

Four types of statistical studies are being made regarding cancer of the lung:

(1) Retrospective—the study of a group that has developed lung cancer

(2) Prospective—the study of a group expected to develop lung cancer

(3) Animal experimentation—to find casual agents of cancer of the lung

(4) Tissue studies of lungs of smokers and nonsmokers.

STATISTICAL ERRORS

The chief defense the tobacco industry uses against the casual relationship of cigarette smoking to lung cancer is known errors in statistics. Also, they point out that the human element is present in any work rendering the statistics partially invalid. The emotions of smokers versus nonsmokers may effect the reasoning and the conclusions.

VALUE OF CONCLUSIONS

Dr. David D. Rutstein, professor of preventive medicine at Harvard University School of Medicine, in an article in the *Atlantic Monthly,* Oct. 1957, asked Dr. Clarence Cook Little of the Tobacco Industry Research Committee this pertinent question: "In spite of the possible limitations of the (statistical) method of study, the control of many human plagues in the past has depended solely on the kind of information you (Dr. Little) have criticized as being only statistical. In 1796, when Dr. Edward Jenner recommended vaccination with cowpox for protection against smallpox, he did not know the cause of smallpox. He knew only that milkmaids who previously had cowpox had immunity against smallpox. This was purely a statistical association. The virus for smallpox was not discovered until the early 1900's —over a century after the disease had been brought under control in civilized countries. . . . Would you (Dr. Little) have recommended that vaccination against this highly fatal and widespread disease be delayed for a century because the evidence for it was only 'statistical,' and because Jenner had not discovered that cause of the disease?"

Sir Percival Pott noted that chimney sweeps' cancer of the scrotum was described and a method for its prevention worked out 150 years before the carcinogens in soot were identified. John Snow, in 1854, statistically related cholera to one of the London water sources. The plague was controlled 40 years before the germ (cholera bacillus) was discovered.

STATISTICAL DATA

There is little need for change of cigarette brands because of nicotine or tar content. They are variable and also vary according to the smoking habits of a person, such as how hard he draws, how deeply he inhales, how short his cigarettes are smoked. The year 1958 was an all time high for cigarette consumption for persons 15 years and older—3,600 cigarettes per person per year, or a total of 430 billion cigarettes.

Smokers have a 10 times greater chance of having cancer of the lung than nonsmokers. Twenty per cent of all male deaths from cancer were due to cancer of the lung. Regular cigarette smokers have a death rate 60 per cent higher than nonsmokers. People who smoke two packs daily have 70 times greater chance of lung cancer than nonsmokers, or, one out of every eight to 10 men smoking two packs daily can expect to die of cancer of the lung, according to *Consumers Bulletin* (March 1959).

In smoking, ⅔ of the nicotine is lost in the air, a little is absorbed in the mouth and ⅕ is absorbed in the lungs. One cigar equals four to five cigarettes. One pipe of tobacco is a little more than one cigar in nicotine and tar content. The hotter the fire, the more nicotine and tar. Smoking twice as fast gets 10 times more nicotine in the body. The nicotine in two cigarettes, if injected intravenously quickly, will cause instant death. There are 23 million gallons of nicotine in the 400 billion cigarettes that we smoke yearly. This is enough to kill 1,000 times the entire population of the United States if given as a single injection. If you smoke one pack of cigarettes daily, you take into your lungs 27 fluid ounces of tar each year. Smoking is a cause of stomach ulcers and 20 per cent of stomach ulcers become malignant.

UNIVERSITY STUDIES

At Yale University, in a four-year study, nonsmokers had 77 per cent better chest development over smokers and 24 per cent greater growth development. At Wisconsin University students were tested for skills of holding a delicate instrument in a small opening. Regular smokers were 60 per cent more unsteady than nonsmokers.

Dr. Evarts Graham of St. Louis did the first successful removal of a lung for cancer. His studies showed 0.5 per cent of cancer of lung cases were smokers and 95 per cent of cancer of lung cases were steady smokers.

Andrew Salter in his book *Conditioned Reflex Therapy* makes the following computation from the work of Dr. Raymond Pearl of Johns Hopkins: "The heavy smoker pays with 34.6 minutes of his life for each cigarette he smokes. The pack-a-day smoker with 11.5 hours for each pack he smokes."

Reader's Digest (Nov. 1959) points out, "Lawyers say there is a valid legal reason for cigarette companies never to admit they cause cancer. By conceding that cigarettes can cause lung cancer,

the companies might leave themselves wide open to damage suits brought by the estates of cancer victims who smoked their particular brands. Several such cases are now pending in the courts."

DEATH RATE

In the past 20 years, death rate from cancer of the lung has increased eight times, the most rapid rise ever reported for any noninfectious disease in the history of the world. Lung cancer is now a leading cause of death in men. It occurs 10 times as often in smokers as in nonsmokers, 20 to 30 times as often if one pack is smoked a day and 40 to 60 times as often if two packs are smoked daily, according to *Consumers Reports* (Dec. 1958).

Statistical studies in the United States, Finland, Germany, Holland, Norway, and Switzerland all show the relation of lung cancer to smoking. The medical officer of health of London, England, has posted the following statement throughout that city:

Smoking and Health

> "It is my duty to warn all cigarette smokers that there is now conclusive evidence that they are running a greater risk of contracting lung cancer than nonsmokers. The risk mounts with the number of cigarettes smoked. Giving up smoking reduces the risk."

Dr. Leroy E. Burney, surgeon-general of the United States Public Health Department, concludes his report in the *Journal of the American Medical Association* (Nov. 28, 1959) with this statement: "The weight of evidence at present implicates smoking as the principal etiological factor in the increased incidence of lung cancer . . . stopping cigarettes, even after long exposure, is beneficial. No method of treating . . . or filtering . . . has been effective. . . ."

STUDY REPORT

Drs. Auerbach, Stout, Hammond, and Garfinkel reported on lung studies at the Dec. 1959 meeting of the American Medical Association at Dallas, Texas. During the studies, 402 men's lungs were dissected and sliced for pathological study. Fifty slices were studied from each man's lungs and all slices were shuffled so no pathologist knew whom he was studying. Among the cancer cases, nearly all slides were abnormal; among heavy smokers nearly all slides were abnormal; among light smokers 2.6 per cent were normal slices; among occasional smokers 41.8 per cent were normal slices; among nonsmokers 51.0 per cent were normal slices. Eleven per cent of cancer cases showed additional cancers besides the one causing death.

Why has lung cancer never been produced in experimental animals? This question has been asked sincerely and insincerely by many. The answer is simple. We have never been able to teach a mouse how to inhale deeply. In fact, experimental mice, rats, and rabbits close their mouths and pucker their nostrils to avoid inhaling the smoke. Their turbinates and mucous membranes act as a filter. I am certain the art of deep inhalation will be difficult to teach to our most intelligent monkeys, chimpanzees and orangatangs. Mice or rabbits will never learn. It is more practical to continue the study on humans.

WHAT ABOUT FILTERS?

This is my personal belief. No experiments have been done, but I believe this hypothesis is correct. Filters are not the answer. Filters are fakes. Filters will increase the incidence of cancer of the lungs. Why? Because the milder and more filtered the smoke, the more deeply it must be inhaled to give you the "kicks." I am advising my patients who will not quit cigarettes to change to the strongest type of nonfiltered cigarette available, so they can get their "kicks" or "pleasure" without having to inhale so deeply. Cigar and pipe smokers have less cancer of the lung because they get their "kicks" without deep inhalation. Lung cancer made its appearance after cigarettes were made so mild that women could smoke them.

CHILDREN AND TEEN-AGERS

Just how early do children start smoking? Last month a first-grade teacher reported to me she had two children smoking tobacco, not rabbit tobacco, regularly in the form of cigarettes.

Dr. Daniel Horn and associates conducted a study of the smoking habits of teen-agers in Portland, Ore., under the sponsorship of the American Cancer Society. The study comprised 21,980 teen-agers in 11 public schools, five Catholic schools, and five suburban public schools. Of these 11,060 were boys and 10,920 were girls. The conclusions as published in the *American Journal of Public Health* (Nov. 1959) were:

(1) A high percentage of teen-age smokers have parents who both smoke.

(2) Boys mimic fathers—girls mimic mothers.

(3) There was a higher percentage of teen-age smokers in families where both parents continued to smoke than in families where one or both parents had given up smoking.

(4) A higher percentage of students smoke in each higher grade.

(5) Catholics have a higher percentage of smokers, city schools next, and suburban schools the least number of smokers in teen-agers.

(6) A high percentage of smokers were found among the nonathletic students and the teen-agers who did not participate in school activities.

(7) The percentage of regular smokers by grades were:

	Boys	*Girls*
Freshmen	14.5%	4.5%
Sophomore	25.2%	10.6%
Junior	31.1%	16.2%
Senior	35.4%	26.2%

(8) A significant factor in the Horn study is the effect of the smoking on the scholastic, extra-curricular, and social lives of the Portland students. The heavy smokers did not go out for sports, they shunned mentally demanding subjects like higher mathematics, they displayed little active interest in the school's social and hobby clubs. The heavy smokers showed a smaller percentage desiring to go on to college. The heavy smokers were older.

The majority of the heavy smokers came from homes where neither parent graduated from high school. In families with a low educational level, smoking is taken up at an earlier age.

THE PRESS

The public press and news media are to be commended for an excellent service to the public. They have reported the facts fairly, even though the tobacco interests spend large sums advertising. The American Medical Association has discontinued all tobacco advertising in its publications. Since tobacco is injurious to good health, an organization dedicated to preserving health should, in no way, contribute to the promotion of tobacco. Some recent press releases are interesting. Advertising has so promoted the sales of cigarettes in the face of their proven harmful effects that in 1958 enough cigarettes were produced to make a carpet 7 feet wide and one cigarette thick to reach from the earth to the moon, or 221,900 miles.

Science Digest (Aug. 1959) reported that 80 per cent of lung cancer victims had smoked 9,125 packs of cigarettes, or an average of two packs daily for 12½ years. The hazards are greater in youngsters. Only eight of 500 lung cancers were nonsmokers, 19 smoked a pipe or cigars, and the other 473 smoked cigarettes, in a study by the Massachusetts Department of Public Health and Harvard School of Public Health.

So much has been reported about cancer of the lung relating to smoking that other areas have been overlooked. Death from cancer of the mouth, esophagus, tongue, and larynx is five times higher in smokers than in nonsmokers, according to Hammond and Horn in *Senior Scholastic* (April 13, 1960).

In Dec. 1959, *Scholastics Magazine's* Institute of Student Opinion found that of 10,763 students polled, 97.4 per cent believed cigarettes were linked to lung cancer. In spite of this, 21 per cent of the students smoked. Educational programs do prove effective as shown by the fact that ⅖ of the boys and ⅔ of the girls who were new smokers quit after an educational campaign was conducted in the schools of Portland, Ore. "The kids behave like adults, but the adults behave like children regarding smoking habits and cancer of the lungs" was the opinion of the researchers.

Dr. Joseph Berksen of the Mayo Clinic believes that smoking probably accelerates the rate of living or promotes aging so that at 50 years of age, a smoker's body might be much older, his tissues might resemble those of a 60-year-old man. If this is true, we need to drink from the Fountain of Youth every time we smoke.

Time Magazine (Dec. 14, 1959) after giving the statistics of the 402 lungs studied by pathologists, concluded with this pertinent statement: "If challengers of the link between smoking and cancer want evidence based on humans instead of animals—this is it."

Time Magazine (Jan. 25, 1960) reported Dr. Patrick Lowther of London as saying that the burning of soft (bituminous) coal in open grates and the discharging of soot at lung level is increasing the rate of lung cancer in England. I am also of the opinion that the heavy fogs in London and vicinity are also a factor in keeping the contaminated air at lung level.

THE LEGAL QUESTION

Where do the tobacco companies stand legally? This is a very pertinent question. Tobacco companies and the tobacco industry form a large segment of our economy. Their well-being must be considered. However, they are not the major concern. We cannot tolerate or condone any segment of our industrial way of life if it proves to be a menace to the health and well-being of our nation. There have been, and still are, numerous examples of this. Our dairies must produce Grade A milk and they cannot sell raw milk. Our slaughterhouses are controlled. Our restaurants are inspected. Food handlers must pass rigid health requirements. Foods must be labeled properly. All

poisons must be properly labeled. The contents of potent ingredients must be stated. Minors are not allowed to purchase alcohol when legally sold.

In view of these facts and many others, the tobacco industry finds itself in a precarious position. It must either about-face and discipline itself, or be controlled by law to prevent further hazards. Cranberries were taken off the market when only the slightest evidence of cancer was shown. Lipstick colors that *may* be dangerous have been banned. Even Carter's Little Liver Pills were required by the Federal Government to change their name to Carter's Little Pills (so that people would not think they had a "little liver").

Surely the tobacco companies should state on the package that tobacco contains arsenic, tars, and nicotine, all of which have been definitely proven to be harmful and carcinogenic. Certainly, they should not be sold to minors or through vending machines that are unsupervised.

The possession of opium or marijuana is a violation of the law and will evoke a jail sentence. They are two habit-forming weeds people like to smoke.

Dr. Alton Ochsner has stated that tobacco smoking addiction is a disease and testimonial advertising communicates that disease unfairly and irresponsibly to other people, especially to the youth.

Medical News (Aug. 10, 1960) has an article stating that cancer virus is contagious. Dr. Ben R. Burmester of the United States Department of Agriculture's Regional Poultry Research Laboratory at East Lansing, Mich., says there is "overwhelming evidence" that a cancer virus can be contagious and result fatally in experiments he is doing with chickens. If this holds true for humans, any agent that will cause a large segment of its users to develop cancer not only may harm and cause death of the user but will indirectly be the cause of a rapid increase in cancer of all others and even produce a cancer epidemic.

Unless proper labeling, advertising, and sales are started by the tobacco interests, they may have created their own destruction. The legal responsibilities are mounting as more facts are learned. The number of suits pending against tobacco companies will continue to rise. Fear has forced their denial of any and all responsibilities. Regulation labeling and sales will, therefore, have to come from our food and drug administration.

CONCLUSIONS

(1) More is being learned about cancer each year.

(2) Evidence points to the danger of cigarettes.

(3) The danger to youth and teen-agers is the greatest.

(4) Onset of changes in lungs occur 12½ to 25 years before cancer develops.

(5) Cigarettes are more dangerous than other forms of tobacco in causing cancer of the lungs.

(6) Filters are an admission of the fear of danger by tobacco companies and smokers.

(7) The death rate from cancer of the lungs is very high, about 90-95 per cent.

(8) Early detection is necessary.

(9) Prevention is a safer method. ★★★

2120 Fourth Street

THE WORST BETRAYAL

"The worst betrayal of trust that any President or Congress could commit would be to accept whole hog the convention platform of a victorious party and to subordinate the four-year deliberative process of the President and the Congress to the four-day drafting process of nonelected members of a party platform committee."

—Thomas J. Dodd, U. S. Senator from Connecticut

Cardiac Arrest: Case Report

MARTIN L. DALTON, JR., M.D.
Jackson, Mississippi

"Cardiac Team, 3 West stat."
"Cardiac Team, 3 West stat."
"Cardiac Team, 3 West stat."

No hospital-wide signal is more urgent because it announces the grave emergency of cardiac arrest. Designated physicians respond without delay.

Since the first resuscitation following cardiac arrest in 1902, many cases have been reported. While the recovery rate is high for cases occurring in the operating room, the chances for those happening elsewhere are not so good. The author contends that by proper planning cardiac arrest can be handled successfully anywhere in the hospital. He outlines the measures followed by the University and reports a case.

RESUSCITATION FOLLOWING cardiac arrest continues to be reported with increasing frequency. The first successful case was reported by Darling and Lane in 1902 and with the passing of 40 years only an additional fifty cases were added to the world literature.[1] However, with modern advances in surgery and anesthesia as well as in the knowledge of cardio-pulmonary physiology, innumerable successful resuscitations have been performed.

Over 90 per cent of cardiac arrests in hospitals occur in the operating room[2] and it is in this group that salvage with complete recovery is highest (greater than 30 per cent in some series). The factors responsible for this success are the ready availability of thoracotomy instruments and the immediate control of the all-important airway. Quite naturally, assistance by trained personnel is of inestimable value. Nevertheless, cardiac arrest does occasionally occur on an open hospital ward, in the emergency room, and in other areas of the hospital. Unfortunately, the recovery rate in this group is extremely poor, though few data are available in the surgical literature. The following case emphasizes that cardiac arrest can be successfully treated on an open ward.

CASE REPORT

G. J., a 14-month-old colored female infant, was readmitted to the University of Mississippi Teaching Hospital on Sept. 10, 1959, for closure of a colostomy which had been performed at birth as a part of the management of an imperforate anus. She withstood the general endotracheal anesthetic and the operation satisfactorily and was returned to the pediatric ward from the recovery room four hours later. She was rather fretful but her general condition was considered satisfactory.

Shortly thereafter, however, she suffered a "spontaneous" cardiac arrest. One of the general surgery residents was present on the ward, and the chest was promptly opened and cardiac massage instituted, along with mouth-to-mouth breathing. The cardiac arrest team was immediately summoned and an endotracheal tube inserted and positive pressure oxygen therapy begun.

After 30 minutes of massage or manual systole, during which time the heart had not resumed an effective beat, 0.2 cc. adrenalin chloride 1:1000 solution was injected into the left ventricle, followed by an intracardiac injection of 100 mg. of calcium chloride. This was followed by resumption of a normal heart beat. The heart did not fibrillate and defibrillation was not necessary. The normal cardiac rhythm was observed for approximately 10 minutes and the chest was closed in routine fashion.

Meanwhile, a cutdown had been performed, and the infant was rapidly digitalized as a prophylactic measure. One million units of aqueous penicillin and 1 gm. of streptomycin were inserted into the left pleural space via the closed drainage tube. Prophylactic cooling was begun with a Thermorite

From the Department of Surgery, University of Mississippi School of Medicine.

blanket and the rectal temperature was maintained at 96 to 97.5 degrees F. This was done despite the relatively brief period of anoxia of approximately 90 seconds which the infant was believed to have sustained.



Figure 1. Patient G. J. on day of admission.

She was then placed in a routine hospital croupette and begun on highly moisturized oxygen therapy. Three days later the hypothermia and the croupette were discontinued, and her complete recovery was marred only by a mild wound infection. Her subsequent recovery was complete (Figures 1 and 2).

COMMENT ON CASE

From this case presentation, two extremely important factors are obvious. First and foremost, time is of the essence. It is better to open the chest in a rare patient whose heart is still beating than it is to delay unduly because of uncertainty as to arrest. Moreover, thoracotomy must not be postponed for longer than 30 seconds while external stimuli are tried.[5] Secondly, it is axiomatic that both proper instruments and capable personnel must be instantly available if salvage rates for these patients are to be acceptable. In a well-equipped hospital with an adequately informed staff it should be possible to salvage many patients whose cardiac arrest has been due to hypoxia caused by defective pulmonary ventilation.

THE CARDIAC ARREST TEAM

In the University of Mississippi Teaching Hospital certain measures have been instituted throughout the hospital to aid in reducing the needless loss of patients suffering cardiac arrest. In general these measures are:

1. Prompt notification of all individuals primarily concerned with cardiac resuscitation. This is accomplished by requesting the hospital operator to page the cardiac team to the desired ward "STAT," three times at five second intervals; for example, "Cardiac Team, 3 West STAT." At this time all members of the medicine and surgery departments within the vicinity of the stated floor and the anesthetist on call for that particular time converge at the patient's bedside as rapidly as possible. Obviously, all members of these departments must be well versed in the management of cardiac arrest.

2. Instantaneous availability of all needed equipment and drugs. These must be located on all floors and in other strategic locations throughout the hospital. Necessary equipment consists of scalpel with blade attached, rib spreading retractor, airways of assorted sizes, laryngoscope, endotracheal tubes, and suction apparatus. However, the scalpel is the only absolute necessity.

These drugs should be kept available for immediate usage: epinephrine, norepinephrine, calcium chloride, molar lactate, quinidine, and one of the rapidly acting digitalis preparations. Of course oxygen, preferably from a wall outlet, must be close at hand.

3. Immediate availability of defibrillation and cardiac pacemaker equipment. It is wise to have two different sets of this equipment located at separate areas in the hospital, if this is possible. Equipment for effecting hypothermia, whether ice bags or cool-

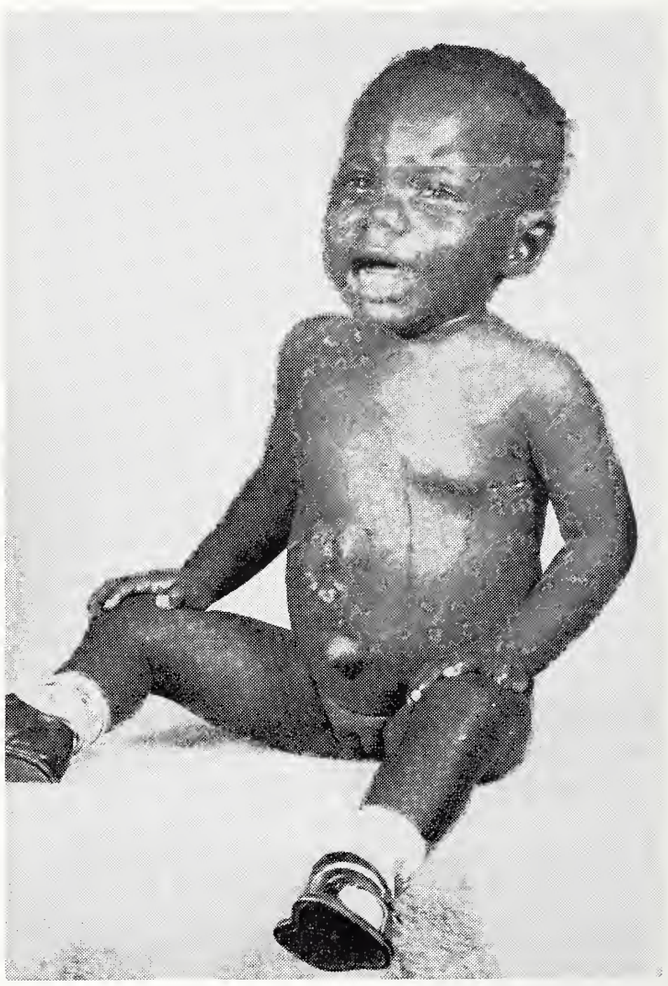


Figure 2. Patient G. J. as seen in outpatient clinic two months after cardiac arrest.

ing blanket, must be readily available to complete the armamentarium.[4]

The above plan is not faultless, but it results in a better coordinated and more successful effort to salvage these otherwise irretrievable patients.

SUMMARY

1. A tested program for the management of cardiac arrest on the open ward is presented. Proper indoctrination of key personnel is a basic requirement.

2. A successful case is presented. Cardiac arrest occurred on an open ward, resuscitation was prompt and effective, and complete recovery of the patient was achieved.

3. It is anticipated that in the future an increased number of patients who have a cardiac arrest outside the operating suite will be saved.

★★★

2500 North State Street

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VOX LABORIS

"We in labor have long felt, and still feel, that the way to accomplish this objective—access to comprehensive health services of high quality for all persons—is through a system of national health insurance. Those who feel that the same objective can be obtained through the development of voluntary health insurance programs are now having their day in court. Despite our reservations, we have no choice but to give a fair trial to the so-called voluntary way.

"Some are quick to throw around phrases like 'socialized medicine' whenever any serious effort is made to examine these matters fundamentally. But 'socialized medicine' will come—if it comes to America—not as the results of the 'sinister plotting' of liberal groups, but as the product of the unwillingness of leaders in medicine and prepayment to meet the legitimate aspirations of the people for the kind of health care that our highly developed society is able to afford. The people are entitled to, and are demanding, modern medical care. Substantial numbers of our citizens believe they can get it through national health insurance, or even governmentally-operated health programs. In the long run the outcome will be determined by whether we make available broad, voluntary prepaid programs whose scope and quality are assured."

Excerpt from speech by Mr. Leonard Woodcock, vice president, United Auto Workers, at a meeting held by the Occupational Health Institute in cooperation with the Chamber of Commerce of Greater Philadelphia, 1956.

Clinicopathological Conference XIV

Conducted by the Department of Pathology
University of Mississippi School of Medicine
Jackson, Mississippi

The subject of CPC XIV is a known diabetic with a past history of a posterior myocardial infarction. He was also known to have moderate hypertensive vascular disease. When he was first admitted to the University Hospital, his chief complaint was lower abdominal pain, and laparotomy showed a mass in the sigmoid colon region. Following a transverse-loop-colostomy, the patient was released. Six months later, an anterior resection of the descending colon and sigmoid colon showed pathology compatible with diverticulitis of the sigmoid colon. After a postoperative course characterized by confused sensorium, a distended and tympanitic abdomen, and finally shock, the patient expired. Discussers are Drs. James D. Hardy, Roger B. Arhelger, Robert D. Sloan, and Thomas M. Blake.

Dr. James D. Hardy: "This 68-year-old white male executive and known diabetic was first admitted to University Hospital on June 9, 1959, with a chief complaint of lower abdominal pain of 24 hours' duration. He had experienced the sensation of impending defecation but was unable to have a bowel movement. He had become nauseated and vomited and he had been taken to his local hospital where laboratory studies revealed 4+ albuminuria, 4+ glycosuria, white blood count 8,400 with normal differential count, and blood sugar 330 mg. per cent.

"The abdominal pain became more severe and shifted to the left lower quadrant. An enema was given without results. The next morning his temperature was 101°, and his abdomen was rigid.

"He continued to have 4+ glycosuria and acetonuria. The fasting blood sugar level was essentially unchanged, but the white blood count was 17,900 with 90 per cent polymorphonuclear leukocytes. Catherization yielded 950 cc. of urine. Thus, during the night his white blood count had shot up, and it is apparent that he had had some sort of a septic leakage which had caused him to begin to show the signs of an infection within the peritoneal cavity. I am curious why he had to be catheterized, unless the peritonitis had made it difficult for him to void or he had benign prostatic hypertrophy, but in any event he did have 950 cc. of urine in the bladder and at that time he was apparently referred to the University Hospital.

"The past history revealed that two years before he had been treated for a posterior myocardial infarction. He had had renal colic on two previous occasions. I do not know whether he had had renal colic and passed stones or whether he had just had renal colic and no stones were found. I wonder if calcium levels were determined and parathyroid adenoma sought? Shortly before the onset of the present illness he had developed congestive heart failure requiring digitalis and diuretics for control. He was known to have moderate hypertensive vascular disease, and I gather that he had not had an aortogram to demonstrate possible occlusion of one renal artery. He was known to have diabetes mellitus, but for a time he required no hypoglycemic agent for its management. Later on he apparently did.

"Physical examination on arrival at University Hospital revealed a well-developed, well-nourished 68-year-old man who was acutely ill. He was moderately well sedated and well oriented. He was dehydrated. Curiously enough, here is a man whom I would have thought had peritonitis and paralytic ileus, but he was drinking freely. The protocol states that he was dehydrated but drinking water freely. I imagine he had lost a good bit of fluid into the peritoneal cavity. The pulse rate was 128 per minute with a regular rhythm. Blood pressure 170/100. In other words, even though he did have infection in the peritoneal cavity and even though he probably lost a good bit of transu-

date fluid into the peritoneal cavity due to irritation, he still was maintaining a good blood pressure. True, the pulse rate had speeded up, but I do not know whether that reflected impending circulatory collapse or only infection.

RESPIRATIONS—NORMAL

"Respirations were 18 per minute, and they appeared normal. I suppose this statement indicates an absence of Biot or Cheyne Stokes respiration. There were no skin lesions, especially no petechiae. Examination of the head, eyes, nose, and throat revealed no abnormalities. The chest was clear. The heart was not enlarged, and there were no precordial murmurs. Peripheral pulses were excellent. No adenopathy. The abdomen was moderately swollen with prominence of the left lower quadrant, swollen with fluid or air or both.

"An appendectomy scar was present and so presumably the appendix had been removed. Therefore the intraperitoneal sepsis I believe to have been present must have been due to other contamination. However, I might say that the presence of an appendectomy scar doesn't necessarily mean that the appendix has been removed, nor does a cholecystectomy scar mean that the gallbladder has been removed. It might merely have been drained.

"There was marked lower abdominal tenderness and rigidity. Now, when there is widespread tenderness and rigidity, it usually means irritation of the parietal peritoneum by some liquid that is flowing about, such as alimentary contents, bile or fluid from pancreatitis. The costovertebral angles were nontender and rectal examination revealed an empty ampulla. No peripheral edema.

ELECTROCARDIOGRAM REPORT

"The electrocardiogram was reported as showing 'first degree AV block' and 'anterior and posterior infarcts, probably old.' I am sure Dr. Blake will have something to say about that later. Flat and erect films of the abdomen were reported as showing 'normal amount and distribution of large bowel gas, and there are several dilated loops of small bowel in the left upper quadrant without evidence of air-fluid levels in the erect position. There is no definite evidence of free air beneath the diaphragm.'

"I might say that air beneath the diaphragm is, of course, not an essential finding for the diagnosis of leakage from the colon or stomach, but the colon and the stomach are the sites of leakage which give the most air beneath the diaphragm. The white count now was 28,000, the nonprotein nitrogen had risen and the fasting blood sugar was 500 mg. per cent. We don't know whether he had been getting glucose intravenously or not.

"On the afternoon of admission he was taken to surgery where a laparotomy was performed. The peritoneal cavity contained purulent fluid and fecal matter. Grossly fecal matter is obviously from the colon, but it is often difficult to distinguish colon leakage from small bowel gangrene by the odor which assails the nostrils when the peritoneal cavity is first opened. But here we learn that an 8 x 10 cm. mass was palpated in the sigmoid colon region. A transverse-loop-colostomy was performed and the peritoneal cavity was irrigated with saline to remove as much contamination as possible; the left lower quadrant was drained with penrose drains. No bowel was resected. Penicillin, streptomycin, digitalis, Chloromycetin, and parenteral insulin were given. After a transient azotemia he had a fairly smooth postoperative course and was discharged on June 27, 1959.

READMISSION DATA

"Approximately six months later he was readmitted to the University Hospital for possible closure of his colostomy. Sigmoidoscopy revealed polypoid excrescences at 12 cm. with firmness of the bowel wall. A biopsy was taken but no tumor was found. An intravenous pyelogram was grossly normal; that is, I suppose it did not show renal stones, tumor or advanced renal infection that would have been demonstrable on the IVP. A barium enema was suggestive of a constrictive lesion in the sigmoid colon. On Feb. 8, 1960, an anterior resection of the descending colon and sigmoid colon was performed. The gross and microscopic pathology were reported as being compatible with diverticulitis of the sigmoid colon. No evidence of tumor was found. Two enterocolic fistulae were corrected at time of surgery. Enterocolic fistulae are not often caused by other than inflammatory disease. If this mass in the colon had represented malignancy, it would have been unlikely to perforate into the small bowel. Fistula formation is commonly encountered in regional enteritis, ulcerative colitis, and diverticulitis. Thus, I conclude that the patient under consideration had an inflammatory lesion.

"On the second postoperative day he was moderately confused and vomited once. He had a normal bowel movement. His legs became cool and mottled from mid-thigh downward, even though pedal pulses were good. He became slightly icteric. Thereafter he became confused, and on Feb. 15, the seventh postoperative day, the non-

protein nitrogen was 103 mg. per cent and the creatinine 4.0 mg. per cent, both indicating inadequate renal function. The total bilirubin was 3.1 mg. per cent with a 2.7 mg. per cent direct bilirubin indicating, I presume, some involvement of the liver and/or hemolysis. The temperature was 100° and the pulse rate 110 per minute. Thereafter his abdomen became distended and tympanitic.

POSSIBLE SEPTICEMIA

"Up until this point we have been led by the protocol to believe that his confused sensorium and so forth had come about in the presence of an abdomen and bowel which were producing a normal bowel movement. But at this time his abdomen had become distended and tympanitic and no audible bowel sounds were present. Of course, in septicemia—and I think that this man must have developed septicemia—one may have absent bowel sounds in the absence of frank peritonitis as such. A Fleet's enema produced 'good results.' It is surprising that in the presence of a recent anastomosis the physicians ordered an enema. However, a week had passed. It doesn't say here that the colostomy was left intact, but I feel sure that the colostomy was not closed.

"Bilateral rales in bases of lungs cleared after endotracheal suction. On the eighth postoperative day he had rales over the right chest. I don't know the significance of why the historian mentioned the rales over the right chest at this particular time unless there was impending heart failure or overt heart failure. This time the rales did not clear up after endotracheal suction. The pulse was irregular and 130 per minute and the axillary temperature was 104°. I presume it would have been about 105° by mouth. Incidentally, axillary temperatures tend to be taken in chaotic situations.

BLOOD PRESSURE

"The blood pressure was 100/60. You will recall that on admission it was 170/100. Thus, in this man 100/60 represented shock and the pulse is said to have been irregular, whether in timing or force the history does not say. There were several possible explanations for the fever. First, the patient may and probably did have septicemia. Second, patients in septic shock frequently do have an elevated temperature, if one takes it rectally. Third, he might have an adrenocortical failure, but this was unlikely. However, the above are common causes of markedly elevated temperatures in surgical patients. Hypotic brain damage is a fourth.

"Tracheal suction here now yielded yellowish-green material. I do not know whether the recorder was trying to be helpful by describing 'yellowish-green material' or not. I don't believe that this man had had a subdiaphragmatic abscess for eight months, the time when he first had peritoneal contamination. A subdiaphragmatic abscess can rupture through the diaphragm into a bronchus to produce profuse purulent sputum. However, the infection in our patient here would seem to have been of a more recent origin. Of course, there might have been a lung abscess, aspiration pneumonitis, or pulmonary embolism with infection.

CONCLUSIONS

"To sum up and offer conclusions, I think that this man had bacterial invasion of the blood stream which may have caused abscesses in various organs—the liver perhaps to cause the jaundice; possibly the kidneys, at least physiologically obviously from the septicemia, and I do not know whether the brain was involved. I am not sure of the source of the septicemia. I think he went into heart failure terminally, but then he already had complete AV block, as I recall. He had had several myocardial infarcts, and he had every reason under the stress of the infection to go into heart failure. And since all surgeons learn to think first of the site where they were operating, when something goes wrong postoperatively and especially where infection is involved, I would first want to know the condition of the colon anastomosis as found at autopsy. If the colostomy was still present and functioning, there should not have been a lot of fecal contamination. The colon anastomosis may have leaked or soiling may have occurred at the sites where the small bowel fistulas had been closed."

Dr. Roger B. Arhelger: "The colostomy had been left and was functioning."

Dr. Hardy: "Well, I certainly would have left the colostomy, in view of the conditions found at surgery.

"I shall have to close without pinpointing the source of infection, but I would emphasize that the most likely source in a hundred similar cases would be in the peritoneal cavity at the site where the operation was done upon the bowel. I think he died of septicemia, and I would be interested in what the blood culture showed."

Dr. Robert D. Sloan: "The radiologic studies are not too helpful. At the time of his first admission recumbent and erect films of abdomen were

obtained. On the recumbent view a moderate amount of gas and fecal material is noted along the course of the entire colon, and moderately dilated small bowel loops are observed in the left mid-abdomen. No air fluid levels are noted on the erect film, nor is any free air identified beneath the diaphragm. The overall pattern is not diagnostic, but an early ileus, either mechanical or paralytic, might be considered.

"At the time of his second admission a routine chest film was obtained. This reveals an enlarged heart with a tortuous and dilated aorta. The lung fields are clear, save for a pleural reaction blunting the left castophrenic angle. There is no way from this single film to ascertain the age of the process. A barium enema was performed by introducing barium into the colostomy and also into the rectum. The major portion of the colon is normal in appearance, as is the terminal ileum, but there is a segment of the sigmoid colon into which barium could not be introduced. It is therefore felt that there is an obstructive process in this region, but it is inadequately visualized to differentiate between an inflammatory or neoplastic process.

"An intravenous pyelogram reveals fair opacification bilaterally, with no evidence of obstructive uropathy or other gross pathology in the upper drainage tracts."

MYOCARDIAL INFARCTION

Dr. Thomas M. Blake: "This is a good example of a case in which I am confident that there was infarction of the myocardium involving both anterior and diaphragmatic aspects. The broad, slurred, initial QRS negativity in leads 2, 3, and AVF points to a lesion of the inferior, or diaphragmatic or posterior, wall, and changes in the precordial QRS complexes are almost as unequivocal. Here we begin with a good positive initial deflection in V1 and V2 but by the time we get to V3 it's smaller and slurred and distinctly abnormal and in lead V4 there is a tiny initial negative deflection. I think these changes are enough to establish that the anterior wall is involved.

"The thing I want to say chiefly is that when we say anterior myocardial infarct and posterior myocardial infarct what we really mean is that it shows in the precordial leads or it shows in the frontal plane leads which view the inferior aspect of the heart. Breaking down of infarcts into right and left, high left lateral, low left lateral, and apical, and some people even think they can tell septal involvement, is of little, if any, significance. An infarct is an infarct. Its specific location doesn't have any prognostic significance except as it involves a critical part of the heart, and this can be anterior, posterior, or anywhere else. This patient had infarction of his myocardium and by indicating anterior and posterior we mean that it can be seen from these two views. It does not necessarily mean that he has had two separate infarcts."

AUTOPSY REPORT

Dr. Arhelger: "Are there any further comments? This case had several interesting aspects. External examination at the time of autopsy showed a partially healed abdominal surgical incision which was 23 cm. in length extending from the level of the umbilicus to approximately 7 cm. above the symphysis pubis. There was a transverse loop colostomy just to the left of the midline which appeared to be functional with no apparent leakage around the incision.

"The heart was enlarged weighing 550 gm. The left ventricular wall was hypertrophied, measuring 2 cm. in thickness. A large aneurysm was present in the septal wall of the left ventricle containing a well-organized mural thrombus. An ulcerated atheromatous plaque was present around the ostium of the right coronary artery.

"The aneurysm was approximately 4 cm. in largest diameter and the wall was extremely thin, though extremely tough. The aneurysm bulged into the right ventricle without completely occluding it. The left coronary artery was almost completely occluded approximately 4 cm. from its origin by atherosclerosis and old thrombus which appeared to be recanalized. The same was true of the right coronary approximately 2 cm. from its origin. There were no other scars or hemorrhages in the heart.

FURTHER FINDINGS

"The aorta was markedly sclerotic throughout, with ulceration, calcification, and mural thrombosis, and there was a small aneurysm in the arch of the aorta which measured 2 x 3 cm. The renal arteries were atherosclerotic, but were both patent. The lungs were heavy, each weighing over 500 gm. and the tracheobronchial tree contained a moderate quantity of yellowish-green material. The mucosa was markedly hyperemic throughout and sections through the lung showed hemorrhage around small bronchi and bronchials, quite a bit of inflammatory infiltrate and fluid. These findings were considered to be characteristic of aspiration pneumonitis.

CPC / University of Mississippi

"The peritoneal cavity contained approximately 700 cc. of foul smelling greyish-green material. The peritoneal surfaces were dull with scattered areas of hyperemia and yellowish-brown shaggy exudate throughout. There were numerous fibrinous adhesions between loops of bowel, and the tissue beneath the abdominal incision was almost completely necrotic. The necrosis extended almost up to the skin.

"There was marked distention of the gastrointestinal tract throughout and the large bowel appeared essentially normal from the cecum up to the point of the colostomy. Starting approximately 10 cm. distal to the colostomy, the mucosa was markedly hyperemic and the remaining colon contained tarry stool. The site of the end to end anastomosis was located within the pelvis approximately 25 cm. from the colostomy. The bowel from the colostomy down to the anastomosis had pulled over almost to the midline and was as tight as a violin string. It was pulled so tight that the anastomosis had almost completely separated. There were just a few sutures left holding it together with a result that there was free spillage into the peritoneal cavity. The bowel on both sides of the anastomosis was viable even with the severe surrounding peritonitis.

"An incidental finding was a small splenic infarct which appeared old and probably resulted from an embolus from the heart.

"Several partially hyalinized islets were present in the pancreas. Although hyalinized islets are found in approximately 50 per cent of diabetics, they are also seen in many elderly people, and their diagnostic value in diabetes is still in doubt.

"The kidneys showed severe arteriolar nephrosclerosis. The liver was somewhat enlarged, weighing 1760 gm. and microscopic section showed a moderate amount of passive congestion.

"In summary, the anastomosis broke down because of too much tension resulting in free spillage into the abdominal cavity. The patient died of the severe peritonitis which resulted. Blood culture taken at autopsy failed to grow any organisms." ★★★

2500 North State Street

A LION'S SHARE

An editorial in the January *Journal of the Medical Association of the State of Alabama* laments that the state spends an equal amount to care for its mental patients and to feed the lions in the Birmingham zoo ($2.50 per day per patient and/or lion). According to Dr. Floy J. Moore, the situation is very different in Mississippi. Says Dr. Moore: "The Jackson lions are worse off than the state mental patients and they are both worse off than their Alabama counterparts." (Food for Jackson lions costs $1.25 per lion per day while the state spends $2.38 per day per mental patient.) Distressing Note: Alabama ranks 45th in the nation in per day expenditure on mental patients and that puts Mississippi *you know where.*

SPECIAL ARTICLE

Medical Education in Mississippi

Part III

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The second quarter of the 20th century was an eventful period for the University of Mississippi two-year medical school. In the 1930's a faculty "shake-up," coupled with decreased finances, led to temporary loss of accreditation. World War II placed a heavy demand on all educational facilities, and the medical school increased its operation to 12 months. All was not bad, however. A hospital building was completed, a library and a librarian added, and a clinic organized during this period. Finally, in 1950 the Legislature appropriated funds for construction and equipment of the University Medical Center. The school officially opened for its first session on Sept. 6, 1955, and the first Mississippi trained physicans in 47 years received their M.D. degrees on June 12, 1957.

THE RESIGNATION in 1924 of Dr. Waller S. Leathers as dean of the University of Mississippi Medical School marked the beginning of an eventful decade for the institution. Dr. J. O. Crider succeeded Dr. Leathers as dean and as professor of physiology. During his administration the hospital building was completed. This facility provided needed laboratory and class space and facilities for instruction in physical diagnosis.

It was also during the administration of Dr. Crider that the University Medical School suffered what must have been its blackest hour. One morning during July 1930 newspapers reported that several members of the University faculty, including Drs. J. O. Crider and Peter Rowland of the medical school, had been dismissed by the Board of Trustees. Although a "shake-up" that had previously caused the resignation of Dr. E. S. Sanderson, chairman of the department of pathology and bacteriology, was in process, the dismissal of these other professors came as a complete surprise. This action, for which a reason was never given, resulted in the loss of three department heads, for Dr. Crider was also head of the department of physiology and Dr. Rowland was head of the department of pharmacology.

Upon learning of these dismissals, the Council of Medical Education and Hospitals of the American Medical Association immediately dispatched a letter to Governor Theodore G. Bilbo threatening to drop the medical school from the accredited list. As a result of this letter and public opinion. Drs. Crider and Rowland were reappointed almost immediately, but Dr. Crider resigned to become assistant dean and associate professor of physiology at Jefferson Medical College in Philadelphia, Pa.

Amid all this turmoil and with the threat of losing its accreditation still hanging over the school, Dr. P. L. Mull consented to accept the deanship. Fortunately, the new school was on good terms with the University of Tennessee Medical School. The dean, Dr. O. W. Hyman, a former member of the University of Mississippi Medical School faculty, allowed Dr. Amberson, head of the department of physiology at U.T., to fill in as professor of physiology, with part-time assistance from others in his department.

The school was indeed fortunate that it did not lose its accreditation, but its approval was "held in abeyance until the effects of these changes could be determined." With the cooperation and guidance of the Association of American Medical Colleges and the Council on Medical Education of

the American Medical Association, the medical school resumed full function and even added several full-time faculty members, a library and a librarian, and a clinic under the management of Dr. John C. Culley.

DIFFERING OPINIONS

Agitation arose in some quarters favoring permanent closing of the medical school on the grounds that its cost was excessively high. Analysis of the situation showed, however, that the per capita cost to the state per year for medical students was less than the per capita cost per year for other University students because of the higher tuition paid by medical students. Furthermore, it was shown that the medical school graduates would earn and spend in Mississippi in one year almost as much as the state had spent on educating all the students to that date. Not least of the advantages was the opportunity to study medicine granted to many state boys who otherwise could not afford a medical education. Some persons took another view, maintaining that a full four-year medical school should be organized in the state, operating independently of the University. In opposition to this proposal, it was pointed out that what Mississippi needed was reinforcement of existing facilities and not creation of what undoubtedly would be a second rate medical school. Neither of these proposals became a reality. The two-year school continued and perhaps, in the final analysis, gained immeasurably from the experience because of increased interest.

Much of the credit for this achievement must go to Dean Mull, who worked hard and long, against what at times must have appeared to be almost insurmountable odds, to "sell" the medical school to the state and at the same time maintain an acceptable teaching program. Much credit is also due the students of that era who worked hard to uphold the past high traditions of the school.

BUDGET REDUCTION

Almost as soon as the school began to be on the road to recovery from its politically tainted "illness," it faced another battle. The budget for the session 1932-33 was drastically reduced because of the economic depression. The decreased finances, coupled with the previous faculty "shake-up," resulted on Feb. 12, 1933, in removal of the school from the list of Class A medical schools by the Council on Medical Education and Hospitals. However, the council provided that other institutions could afford full credit for the work done by the students regularly enrolled at that time.

On Sept. 22, 1933, the council passed the following resolution: "That the University of Mississippi School of Medicine be placed on probation until July 1, 1934, and that the freshmen enrolled for the session 1933-34 be recognized." The council took no further action prior to the end of the period of probation and thus the freshman class of the session 1934-35 enrolled without recognition, although the sophomore class of that session was recognized in the previous action of the council. The session went on to completion without any further recognition by the council.

As the session drew to a close, Dr. P. L. Mull on June 1, 1935, resigned as dean, although retaining his position as professor and head of the department of anatomy. Dr. Billy S. Guyton, adjunct professor of minor surgery, was named acting dean, and Dr. James R. Simms, Jr., assistant professor of bacteriology, pathology, and clinical diagnosis, was named assistant to the dean. Dr. Guyton subsequently was named dean, thus becoming the first and to this date, the only former student of the school to assume the deanship.

ACTIONS OF COUNCIL

There was no further action from the council during the session 1934-35. Since one unrecognized class was already enrolled, no freshman class was admitted for the session 1935-36. This was the only session in the school's history during which no freshman class was enrolled.

Fortunately for the sophomores of that session, the council in Dec. 1935 accorded recognition to that class. About two months later, in February of 1936, the council granted recognition for the session 1936-37. There was, of course, no sophomore class during that session as no freshman class had been enrolled the previous year. Except for a brief period of probation beginning on Oct. 11, 1936, the year passed without further loss of recognition. During the session 1937-38, the school regained its Class A rating which it has maintained since.

While the situation at the University of Mississippi was a somewhat peculiar one, it must also be stated that it was not the only two-year school to suffer through these periods of probation, loss of accreditation, and temporary recognition.

During the mid 1930's there were changing attitudes and differences of opinion regarding the status of the two-year medical schools. Many maintained that the two-year schools were handicapped by lack of direct contact with the final two

(Turn to page 103)

years of medical instruction. The University of Mississippi partially overcame this handicap through several programs. These included collection of pathologic materials from many hospitals in north Mississippi, autopsy of cases obtained from the Mississippi State Hospital, attendance at the previously mentioned outpatient clinic, assignment on certain days to visit and observe certain medical cases and surgical procedures at Oxford's two hospitals, "rotation" during part of one quarter through the Mississippi State Sanitarium and the State Hygienic Laboratory.

STATUS CLARIFIED

In Feb. 1937, the Council on Medical Education adopted a policy, to become effective July 1, 1939, clarifying the status of two-year medical schools and classifying them officially as "Schools of the Basic Medical Sciences."

A library had been established and a librarian employed following the faculty "shake up" in the early 1930's. However, it was Jan. 1937 before the library occupied its newly equipped quarters in the north wing of the medical school building. At that time the library had a full-time librarian and four assistants. In 1937 the library had over 6,000 books, better than 1,700 bound volumes of journals with 200 additional volumes ready for binding, and was receiving approximately 100 current journals.

Dr. P. W. Rowland became field director of the medical library in 1937. In an effort to improve the library facilities, he asked the members of the Mississippi State Medical Association and the former students of the school to give one book each or its equivalent in money to the library. Cooperation was good and texts, monographs, and journals began to come in. Included were several private libraries secured through Dr. Rowland's efforts. Just recognition was accorded Dr. Rowland in 1938, when the Board of Trustees approved a proposal naming the library the "Rowland Medical Library." His efforts and influence continued during his active days. The library has continued to grow and at present contains almost 35,000 bound volumes and receives about 850 current journals.

Medical education may take many forms. Certainly, not all organized teaching is done in medical schools, and education does not end with graduation from medical school or even with completion of an internship or residency. It is very truly a dynamic and multifaceted thing. One of its many forms is postgraduate education. Today the University of Mississippi Medical Center serves as a focal point for postgraduate seminars and conferences. This form of postgraduate medical education probably had its beginning in Mississippi during the 1930's, at least on an organized basis.

POSTGRADUATE CIRCUITS

Through the Mississippi State Medical Association, the State Board of Health, the Mississippi State Hospital Association, in cooperation with Tulane University School of Medicine and the Commonwealth Fund, postgraduate circuits were organized. A course was made up of 10 sessions, one session each week for 10 consecutive weeks. A circuit was made up of five towns, the visiting lecturer appearing in each of these towns one night each week during each of the 10 weeks. An organizer, who went ahead of the lecturer, presented the plan to each local medical society. The 10 sessions consisted of lectures, movies, and practical illustrations, in some cases of such things as aseptic technique in management of obstetrical cases. In addition to the regular sessions, the lecturer was often called on as a consultant in handling difficult cases.

SCHOLARSHIP AWARDS

The Commonwealth Fund of New York contributed to another aspect of medical education in Mississippi. During the early 1930's, funds were made available for four or five new scholarship awards each year to medical students who would agree after graduation to take approved hospital training and to settle in a rural community approved by fund officials and a committee at the medical school. Recipients were selected by a faculty committee at Tulane University, the school through which the scholarships were available. The first scholarships were granted in 1933-34 and went to the following recipients:

Martin Luther Flynt, Jr.
Charles Roderick Jenkins
Thomas Harrison Lambert
Howard Alexander Nelson
Robert Peyton Vincent, Jr.

The last of these scholarships were granted in 1940. Out of a total of 43 recipients, only three failed to fulfill contract obligations, exclusive of those who were called into service while practicing in an approved area.

As the 1930's drew to a close, the two-year medical school could look back on its most hectic decade. But the 1940's were destined to bring many hardships, trying times, and a number of significant changes. Hardly had the 1940's started

good before the United States felt itself in the throes of a world war, bringing with it the demand for more doctors. This demand was felt in Mississippi as in every other state. During 1942 the University of Mississippi, as well as other medical schools throughout the United States, went on an accelerated schedule. This meant operating 12 months per year instead of the usual nine months and during the four years this schedule was followed, five classes were graduated instead of the customary four classes.

MEDICAL SCHOOL DEANS

In 1943 Dr. Billy S. Guyton resigned as dean, leaving behind an enviable record. The school had, in addition to regaining its full Class A rating, regained much of the prestige and influence it had lost during the 1930's. His administration had also seen the coming of World War II and the accelerated teaching program. Since 1944 Dr. Guyton has been dean emeritus of the medical school. He was replaced as dean by Dr. J. B. Looper, then professor and chairman of the department of anatomy. Dr. Looper was succeeded by Dr. David S. Pankratz, who had previously succeeded Dr. Looper as chairman of the anatomy department. Initially Dr. Pankratz was named acting dean, but in 1946 he was named dean. Dr. Pankratz resigned effective February 15, 1961. As this issue went to press, Dr. Robert Q. Marston, assistant dean of the Medical College of Virginia in Richmond, was named to succeed Dr. Pankratz, assuming this duty on July 1.

STUDENT OVERFLOW

As World War II ended, returning servicemen, aided by the G.I. Bill of Rights, clamored to colleges and universities all over the country, virtually overflowing their capacity. Medical schools were no exception. Consequently the University of Mississippi Medical School was authorized by the Board of Trustees to admit two classes of approximately 28 per year. New equipment was provided, and the plan was put in operation with the beginning of the 1946-47 session. Except for a few schedule conflicts arising during the first one or two sessions, this plan proved quite satisfactory and was continued until the present Medical Center was opened in Jackson in 1955.

Following World War II the number of physicians in Mississippi was decreasing at an alarming rate, but it was in the rural areas that these losses were most severe and were felt with the greatest impact. Recognition of this fact motivated passage of the Mississippi State Medical Education Scholarship program by the Legislature of 1946. The act creating this program was written by the Honorable Walter Sillers, speaker of the house, and a small group of his colleagues, being patterned somewhat after the previously mentioned Commonwealth Fund Scholarship. Briefly, this act provided scholarship loans to worthy bonafide Mississippians who were eligible for admission to an accredited medical school. The loan was not to exceed $1,250 per school year, up to a maximum of $5,000 for four years, in any medical school in the United States. Each applicant was required to contract to practice in a rural, or other board-approved, area in Mississippi. Upon completion of five years of such practice the entire loan was to be cancelled.

An optional settlement was provided whereby the practicing doctor might elect to settle two-fifths of the total amount of the loan by practicing two years and then, but not before, have the privilege of repaying in cash the remaining three-fifths of the loan plus 4 per cent interest. Since the greatest need existed in rural areas, the act stipulated that 75 per cent of physicians so aided must locate in rural areas of 5,000 population or under by the 1940 census. A limited number could be approved for locations above 5,000 in population. Contract obligations could also be met by practice at state charity hospitals, the tuberculosis sanitarium, and the state mental hospitals.

SCHOLARSHIP PROGRAM

Within recent years, a few changes have been made in the original act. In 1954 the appropriation bill provided that only students at the University of Mississippi School of Medicine could receive scholarship loans, with the exception of Negro applicants, who were approved to enter any accredited school that would accept them. In 1958 the appropriation bill provided further that all state-scholarships at the University of Mississippi School of Medicine should be limited to fulfillment by public health service. Through 1958 there had been 609 participants in the program, over 350 of whom had completed their medical education and were practicing in the state, with 115 of this latter group having completed their five years of obligated service.

The Feild Cooperative Association Fund, while not restricted to medical students, has made a very significant contribution to medical education in Mississippi by extending loans to many Mississippi medical students during the more than 35 years of its existence.

While the previously mentioned changes and improvements made in medical education in Mississippi immediately following World War II were of inestimable value to the state, it was apparent to those close to the situation, even at that early date, that the only real and sensible solution to the doctor shortage in Mississippi was a fully accredited four-year medical school operated by the University of Mississippi. Such foresighted Mississippi medical men as Dr. Felix J. Underwood, under whose guidance the Mississippi State Board of Health achieved national prominence in public health work; Dr. Henry Boswell, who almost singlehandedly built the Mississippi State Tuberculosis Sanatorium into one of the best in the United States; Dr. H. R. Shands of Jackson, prominent in Mississippi medical circles for many years; Dr. David S. Pankratz, dean of the University Medical School, and a host of others began to advocate just such a school even during the days when improvements in existing facilities were being effected.

DECREASE IN DOCTORS

They pointed out that the doctor population of Mississippi was decreasing both absolutely and relatively to the general population, that the average age of the practicing physician in Mississippi was gradually increasing, and that, of necessity, many Mississippians must leave the state, at least for two years, to acquire an M.D. degree. Even during the war years with the school operating on an accelerated schedule and with the overall enrollment of the University at a subnormal level, it was reported that during this approximate four year period, 102 native Mississippi applicants were turned down for admission to the medical school because of lack of accommodations. The inevitable result of Mississippians being compelled to leave the state to complete their medical education was that the majority failed to return to the state to practice. It was reported that in the approximate 20-year period from 1925 to 1945 over 1,000 Mississippians finished medicine in over two dozen medical schools in other states and that less than 40 per cent came back to Mississippi to practice.

Gradually these facts became disseminated throughout Mississippi and more and more interest began to be manifest in a four-year medical school. Fortunately, part of this interest was shared by certain members of the Legislature. In 1950 a bill authored by Representatives Hayden Campbell, Rex McRaney, Andrew Sullivan, David Womack, and (Mrs.) Zelma Price was introduced in the House providing for appropriation for construction and equipment of the present University Medical Center. It subsequently secured passage and became official with the signature of Governor Fielding L. Wright. Some of the ground work for this action was accomplished in the Legislative sessions during the term of Governor Thomas L. Bailey. Spurred to action by the passage of the Hill-Burton Act (Federal Hospital Building Act), the state Legislature passed a number of enabling acts signed by Governor Bailey and in 1946 created the Mississippi Hospital Commission.

COMPLETION OF CENTER

Following this, plans began to be formulated for the construction and organization of the proposed Medical Center. Suggestions were invited, other schools were studied and advice was sought from many quarters. Ultimately, final plans were agreed upon and on Dec. 6, 1952, the first ground was broken. Completion of construction and installation of equipment was accomplished in somewhat less than three years and the University Medical Center admitted its first patient July 1, 1955. With new additions to the basic science faculty and with an all new clinical faculty, the University Medical School at Jackson officially opened for its first session on Sept. 5, 1955, with 138 students enrolled in the three classes. In Sept. 1956 the first senior class was enrolled, and a freshman class of 76, largest to that date, began their studies. Subsequent freshman classes have totaled 80 members. It was a great year for Mississippi medical education and for the state when the first university trained physicians in Mississippi in 47 years received their M.D. degrees on June 12, 1957. Commencement exercises for this class of 24 were presided over by Dr. John D. Williams, chancellor of the University, and Dr. David S. Pankratz, dean of the School of Medicine.

THE FUTURE

Yes, Mississippi medicine marches forward. What does the future hold? What changes will ensue in medical education? Will there soon be a fifth year of medical school as proposed by some? On the basis of present population estimates, Mississippi will suffer a net loss in population by 1970. Despite this loss, studies suggest that the present medical school may have to increase the number of new admissions per year to 100 from the present 80 per year. ★★★

1190 North State Street

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COOL BABIES

A new method of saving infant lives was reported recently at the UCLA Medical School, according to *Insider's Newsletter.* Visiting specialist Dr. Bjorn Wertin of Stockholm said that physicians in many Scandinavian medical centers are treating newborn babies who have difficulty in breathing by putting them in cool environments to lower their body temperatures 5 to 10 degrees. Reason: As the body is cooled, all life processes slow down and the infant has less need for oxygen. When this occurs, the breathing mechanism has less strain and the child can make an easier adjustment to life outside the uterus. Interesting Note: Statistics show that the infant mortality rate in Scandinavian countries is the lowest in the world.

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EDITORIALS

Medical Leadership in Rehabilitation

I. JAY BRIGHTMAN, M.D.
Albany, New York

THE REHABILITATION of the handicapped person to his maximum capacity for functional, social, and economic independence may require a coordinated process in which several professional groups participate. Some patients need only single services, such as physical or occupational therapy. Others require a comprehensive procedure beginning with a complete medical appraisal of the mental and physical status and including an analysis of the social background and the motivational factors and a vocational evaluation of employment potentials and capacity for retraining.

Whether simple or complex, rehabilitation begins with medical care, preferably concurrent with the latter rather than subsequent to it. Certainly, the physician is not the sole determinator of the full potentialities of the patient and he must rely upon the social workers, the therapists, and the vocational rehabilitation counselors for their professional contributions. The physician is responsible for determining the level of mental and physical improvement the patient is likely to reach, the intensity of medical and other services the patient is capable of accepting, and the time such services should begin. Likewise, it is his responsibility to the patient, throughout the entire rehabilitation procedure, to be certain that the latter's health status is maintained at an optimal level.

These medical functions are shared by all physicians, regardless of specialty, who care for patients with any disease or disorder which may leave a residual disability. Responsibility cannot be left for the very small number of physicians who have chosen physical medicine and rehabilitation as a specialty and have received board certification in this field as a mark of their exceptional professional competence. To this group must be assigned the responsibilities for the management of very difficult cases, for the organization of special rehabilitation services, and for providing consultation to other physicians as necessary.

Unfortunately, there are many physicians who have not taken an interest in or accepted responsibility in regard to the rehabilitation aspects of their patient's medical problem. As a result, complaints of the following types are often made by nonmedical agencies administering rehabilitation programs, such as vocational rehabilitation, sheltered workshops, or welfare medical care (Aid-to-the-Disabled):

1. Physicians frequently fail, either deliberately or by just not getting around to doing it, to provide

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the necessary medical information to assist the agency in determining the eligibility of the patient for the rehabilitation program.

2. Physicians often write down, "totally disabled," without reporting any clinical findings to back up such a statement.

3. When adequate clinical reports are submitted, physicians too often state that no rehabilitation services are indicated, when it is known by both medical and nonmedical members of rehabilitation teams that patients with similar types of handicap often show good responses to rehabilitation.

4. It is recognized that rehabilitation services are not adequate in many areas. Yet several of the existing high quality facilities are having administrative and financial difficulties because they are not receiving sufficient referrals from the physicians in the community. On the basis of numerous studies of the prevalence of disabilities in a community, it appears that there are many patients just not being referred for available services.

5. When patients are referred, the physician's request is often made for a single service, such as physical therapy or occupational therapy, when it is obvious to those experienced in rehabilitation that the person requires a comprehensive evaluation. Such persons often have problems in adjusting to their disabilities, which may be interpersonal or may relate to their dealings with their family or their community. On the other hand, it may be necessary for them to have a complete change in work habits or be trained for a new vocational field because the disability prevents them from returning to their former area of occupation. Thus, rather than a few physical therapy treatments a week, they should have a social evaluation and a prevocational counseling and testing service to be followed by actual vocational training if indicated. All of these services should be begun at the earliest possible time.

6. Physicians rarely consider the current labor market or the types of jobs available in the community when recommending handicapped patients for certain jobs. The most common complaint by employment specialists is that physicians state that the patient is suitable for "light work," without having any idea of what "light work" involves. The classic example is the referral of a patient for a position as night watchman, when it is well known that the watchman must make rounds through a multistoried building every hour and be ready to take quick action in case of fire or intruders.

Related to this lack of medical leadership is the frequent tendency of many nonmedical agencies to take for granted that they are the leaders in the rehabilitation field and that physicians play a very secondary role, simply a source for which medical services may be purchased. This seems to reach a peak in the current Federal legislative proposal for a Federal program for "Independent Living Rehabilitation" (primarily a medical rehabilitation program for handicapped persons with no potentialities for return to employment) which would be placed in the vocational rehabilitation unit of the states. This bill (HR-3465) is being sponsored by the National Rehabilitation Association. In a widely distributed "background statement," this association declares that only vocational rehabilitation counselors have the philosophy and the experience to undertake such a program. While holding that rehabilitation for independent living is not primarily medical, the statement emphasizes that the vocational counselors have had lots of experience in running medical programs, and are perfectly capable of doing so.

Thus we see here the pattern which is characteristic of phenomena in other areas of medical care. Whenever physicians fail to exert the necessary leadership in medical problems, there will be lay groups ready to step in and do it for them. It is still our philosophy that physicians should have the key role of responsibility for problems which are primarily medical.



"I'm flat on my back and want you to come right—just a minute while I run and see who's at the door."

Thus we must face the question of "who leads in rehabilitation." Medicine is not the only discipline concerned with the rehabilitation of disabled persons, whether the objective be employment or a maximum degree of independent living. However, the physician is a very important member of that team, and if he is not the captain, he would at least appear to be the quarterback. It is up to him to determine the medical potentialities of a patient and what the patient's mental and physical status will accept.

If the physician fails to carry out this role, there is the immediate danger of unfairness to the patient who may thus not achieve his full potentialities. There is also the long-range danger of handing over medical problems to nonmedical groups on a silver platter. ★★★

84 Holland Avenue

The Legend of Statistics

"How can we teach practical and exact science on the basis of statistics . . . which can bring to birth only conjectural sciences, but which can never produce active experimental sciences, i.e., sciences which regulate phenomena according to definite laws. By statistics, we get a conjecture of greater or less probability about a given case, but never any certainty, never any absolute determinism."

This critical appraisal of the statistical method as it pertains to medicine was written by the man who is now generally regarded as the "Father of Scientific Experimentation," Claude Bernard. Statistics seem to occupy an ever-increasing prominence in medicine. In fact, an impressive statistical survey on any given subject is regarded by many as the primary requirement for authenticity. In view of the exalted position assigned to statistics in these times of much experimentation and research, it seems necessary to apply common sense to the actual importance of statistics.

The mere gathering of facts does not create a science. Medicine should ultimately evolve into a science. The last 20 years have been notable in this respect. Medicine has become more of a science than ever, and this progress must continue. However, to say that a statistic never saved a life or relieved a pain is perhaps minimizing the modern-day emphasis too severely. Claude Bernard recognized the outstanding danger of applying any statistics to the process of logical thought.

There is a mountainous heap of statistics, growing continuously, and often out of proportion to practical application. Much of this statistical pile has become a maze of uncoordinated and unrelated facts. Perhaps the time has come to unravel what we have and to take a second or even a third look at some of the facts already established, if for no other reason then to prevent a reduplication of effort to merely "discover" a fact which has already joined the ranks of a statistic.

An endeavor such as this admittedly has none of the glamor and excitement of a new and dramatic research project. However, there must be an effort made at some time to re-evaluate these facts, filter out the superfluous ones, and match up the pertinent ones. This seems to be a good time to do this.

Jacques Barzun asks, "Wouldn't it be far better not to know so much as to know so many things that ain't so?" We must insist on using facts merely as aids to deductive, logical thought and not to take the place of the thinking process. If facts replace our power of reasoning, then we deteriorate into something less than intelligent, communicative, and sensitive individuals.

Oliver Wendell Holmes in the *Autocrat at the Breakfast Table* phrased it like this: "All generous minds have a horror of what are commonly called 'facts.' They are the brute beasts of the intellectual domain." In spite of the scientific aspects of medicine, it is still very much an art, especially in the doctor's office and at the bedside. Let's not make the fatal mistake of surrendering our patients to the IBM.—T. J. M.



"Just for fun, I asked him if he still wanted to go through with it."

MEETINGS

NATIONAL AND REGIONAL

American Medical Association, June 26-30, 1961, New York City. F. J. L. Blasingame, Executive Vice President, 535 N. Dearborn St., Chicago 10, Ill.

American Academy of General Practice, April 13-20, 1961, Miami Beach, Fla. Mr. Mac F. Cahal, Executive Director, Volker at Brookside, Kansas City 12, Mo.

American Society of Internal Medicine, May 5-7, 1961, Miami Beach, Fla. Mr. G. Tod Bates, Executive Director, 350 Post St., San Francisco 8, Calif.

New Orleans Graduate Medical Assembly, March 6-9, New Orleans, La. Mrs. Irma B. Sherwood, Executive Secretary, 1430 Tulane Ave., New Orleans 12, La.

Southern Medical Association, Nov. 6-9, Dallas, Texas. Mr. Robert F. Butts, Executive Secretary, 2061 Highland Ave., Birmingham, Ala.

Southern Society of Anesthesiologists, March 9-11, 1961, Jackson. Curtis Caine, local arrangements committee, 4332 Manhattan Road, Jackson.

STATE AND LOCAL

Mississippi State Medical Association, May 9-11, 1961, Biloxi. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson.

Mississippi Academy of General Practice, Sept. 27-28, 1961, Jackson, Miss. Miss Louise Lacey, Executive Secretary, Walthall Hotel, Jackson, Miss.

Mississippi Society of Internal Medicine, May 8, 1961, Biloxi. Frederick E. Tatum, Secretary, 707 Katie Ave., Hattiesburg.

Amite-Wilkinson Counties Medical Society, First Tuesday March, June, September, December. S. E. Field, Centreville, Secretary.

Central Medical Society, First Tuesday Monthly, 6:30 p.m., Robert E. Lee Hotel, Jackson. George E. Gillespie, 514-A East Woodrow Wilson Drive, Jackson, Secretary.

Claiborne County Medical Society. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Second Wednesday March and November, 2:00 p.m., Clarksdale. Robert R. McGee, 150 Yazoo Ave., Clarksdale, Secretary.

Coast Counties Medical Society, First Wednesday March, June, September, and November. Charles N. Floyd, 1412-23rd Ave., Gulfport, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday January, April, July, and October, 1:00 p.m., Hernando Motel Cafe, Hernando. L. L. Minor, Route 9, Memphis 9, Tenn., Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. A. Wayne Sullivan, 1204-21st Ave., Meridian, Secretary.

Homochitto Valley Medical Society, Fourth Tuesday Monthly, 7:30 p.m., Natchez Country Club, Natchez. W. T. Colbert, Natchez General Hospital, Natchez, Secretary.

North Central District Medical Society, Second Wednesday March and September. W. A. Middleton, 214 Summit St., Winona, Secretary.

Northeast Mississippi Medical Society, Second Tuesday March, June, September, and December, Tupelo. Thomas W. Wesson, 421 Main St., Tupelo, Secretary.

North Mississippi Medical Society, First Thursday January, April, and October, Oxford. R. L. Wyatt, Holly Springs, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. Samuel O. Massey, Jr., 220 E. Canal St., Picayune, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. Thomas F. Puckett, 715 Arledge St., Hattiesburg, Secretary.

Tri-County Medical Society, Second Tuesday March, June, September, and December. A. V. Beacham, Magnolia, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Tom H. Mitchell, The Street Clinic, Vicksburg, Secretary.

Domestic Journals

Drugs in Psychotherapy. Joseph S. Skobba: Diseases of the Nervous System 21:586 (Oct.) 1960.

The author presents a concise statement of the attitude held by many psychiatrists in regard to the use of drugs in connection with psychotherapy. Many nonpsychiatrically trained physicians find the position taken by these psychiatrists confusing. In a brief presentation the author gives the rationale of these attitudes.

He points out that psychotherapy is based on communication between therapist and patient and is calculated to bring about new adaptive patterns of behavior to replace neurotic maladaptive behavior. Since individuals are prone to suppose that all disease is the reflection of physical disturbance, the lessening of discomfort as a result of medication may be accepted as proof of this and result in a resistance to viewing actual hidden psychological problems which remain unchanged.

Discomfort is an important factor in motivation, and removal of discomfort by drugs, if it occurs, often results in the patient's failure to involve himself in treatment and his insistence that the psychiatrist do something to remove the necessity for medication rather than explore his own attitudes and inner life for the solution to problems.

The patient may shift his concern from the illness to the medication, expecting magical cure, responding to failure to improve as having malignant meaning, and becoming alarmed at physiological reactions—in effect, shifting the neurotic patterns to equally handicapping even though socially more acceptable forms. The medication may be viewed as a powerful magical symbol expected to bring complete relief from problems obviously deriving from patterns of living, and this presents an obstacle which requires analysis and resolution.

At times, when a psychotherapeutic impassé occurs, the psychiatrist may give medication as much for relief of his own discomfort as that of the patient. This weakens the position of the therapist and results in avoiding the necessary resolution of the problems in the therapist-patient relationship. Most patients referred for psychotherapy have unsuccessfully tried many drugs in vogue and failure to respond again to a drug given by the psychiatrist can effectively prevent the development of rapport.

Interposition of a drug between patient and therapist tends to permit the patient to develop a dependency (on the drug and on the therapist) and maintain the idea that he has no active part in the treatment. The need to be dependent and dominated will be satisfied and, in effect, the treatment program itself changed into a neurosis. The use of drugs may threaten the patient's defenses and lead to further retreat and strengthening of defenses with resultant progression of symptoms.

L. C. HANES, M.D.

The General Practitioner and His Neurotic Patient. Joseph Zimmerman: Am. Pract. & Digestive Treat. 10:2163-2165 (Dec.) 1959.

The general practitioner who is interested in his neurotic patient has the responsibility for setting aside sufficient regular time to attend and listen to his patient under conditions of minimal distraction so that his patient can be given undivided and unhurried attention. In "listening" to the neurotic patient, one must first know what to listen for and how to listen.

The raw data of the patient's interview behavior must be carefully evaluated. The physician should not blurt out his first thought of the moment, but suggest, at the appropriate moment, either a point for further inquiry or the possible problem with which the patient may be struggling. Often the simple identification of a problem to the patient may afford him a tremendous amount of relief from tension and anxiety.

Just as the physician is listening to the patient and sensing what is going on in him so, it must be remembered, the patient is sensing what goes on in his physician. The patient will sense, and usually resent, any pseudoscientific and only voyeuristic interest in him and may react in various defensive ways to such a situation. Under these circumstances it may become necessary to refer the patient elsewhere.

If the general practitioner is to attain some understanding of his patient as a human being who is suffering from some psychological complaint, it is essential that he develop some frame of reference for what he is listening to. Whatever theoretical structure or orientation he uses, the

physician must make sure that it makes some sense to him, since the patient can easily detect insincerity in his doctor.

There are numerous different points of view, all readily available in the literature, in courses, and in special lectures. It is suggested that the general practitioner make use of whatever orientation he feels most comfortable with. Dr. Zimmerman points out that adopting the view of a particular school or group should not mean adopting all the clichés and jargon of this group. Rather the general practitioner should try to understand what is meant, and what is most meaningful for him at a particular moment with a particular patient sitting opposite him.

In conclusion, Dr. Zimmerman stresses that it is important for the general practitioner to have some feeling for immediate and long range goals for his patient. Symptomatic relief may be regarded as one immediate goal. With the temporary use of appropriate tranquilizers, and the achievement of some regularity of visits, a better relationship can be established whereby the neurotic patient may find a "friend" in his family physician. Frequently this may be enough to bring the relief the patient is looking for at the moment. On the other hand, when referral to a psychiatrist is in view as a goal, the general practitioner may help in providing support during this difficult transition period.

Department of Psychiatry
University Medical Center



The following physicians have been elected to membership by their respective component medical societies in the Mississippi State Medical Association and the American Medical Association:

Allen, Charles Houston, Jr., Beaumont. Born Pinola, Miss., June 14, 1930; M.D., University of Mississippi School of Medicine, Jackson, 1957; interned Confederate Memorial Medical Center, Shreveport, La.; Captain U. S. Army, two years; elected Dec. 8, 1960, by South Mississippi Medical Society.

Chester, Robert Lee, Jackson. Born Dalton, Ark., Oct. 29, 1926; M.D., University of Arkansas School of Medicine, Little Rock, 1955; interned University Hospital, Little Rock; general practice residencies, Huey P. Long Charity Hospital, Pineville, La., one year, University of Missouri Medical Center, Columbia, two years; junior member of the American Society of Anesthesiology; Technical Sergeant U. S. Army, one year; elected Jan. 3, 1961, by Central Medical Society.

Currey, Thomas Arthur, Amory. Born Itawamba County, Miss., July 9, 1933; M.D., University of Tennessee College of Medicine, Memphis, 1958; interned John Gaston Hospital, Memphis, Tenn.; elected Sept. 13, 1960, by Northeast Mississippi Medical Society.

Davis, Clifton B., Batesville. Born Terry, Miss., May 3, 1930; M.D., University of Mississippi School of Medicine, Jackson, 1959; interned Chatham County Memorial Hospital, Savannah, Ga.; U. S. Navy, four years; elected Dec. 30, 1960, by North Mississippi Medical Society.

Fields, Willard Barton, Sledge. Born Bedford, Ind., Sept. 1, 1926; M.D., University of Tennessee College of Medicine, Memphis, 1956; U. S. Naval Reserve, two years; elected Jan. 1, 1961, by Clarksdale and Six Counties Medical Society.

Goodman, Rexel, Rolling Fork. Born Cary, Miss., Aug. 28, 1897; M.D., University of Tennessee College of Medicine, Memphis, 1928; interned John Gaston Hospital, Memphis, Tenn.; public health residency, Johns Hopkins University, Baltimore, Md., five months; Captain U. S. Navy, seventeen years; elected Oct. 11, 1960, by West Mississippi Medical Society.

Green, Oscar, Jackson. Born Indianapolis, Ind., May 25, 1924; M.D., Indiana University School of Medicine, Indianapolis, 1947; interned Indiana University Hospital, Indianapolis; EENT residencies Indiana University Hospital, one year, Walter Reed Hospital, Washington, D. C., one year; member of the American Academy of Ophthalmology and Otolaryngology; elected Jan. 3, 1961, by Central Medical Society.

Griffin, James Curtis, Jr., Jackson. Born Shannon, Miss., July 10, 1926; M.D., Washington University School of Medicine, St. Louis, Mo., 1954; interned John Gaston Hospital, Memphis, Tenn.; surgery residency, University Medical Center, Jackson, Miss., five years; private U. S. Army, two years; elected Jan. 3, 1961, by Central Medical Society.

HESTER, CLIFTON LAMAR, JR., Raymond. Born Calhoun, Miss., Sept. 19, 1931; M.D., Tulane University School of Medicine, New Orleans, La., 1956; interned University Medical Center, Jackson, Miss.; internal medicine residency, Memorial Medical Center, Williamson, West Va., one year; elected Jan. 3, 1961, by Central Medical Society.

MCLAIN, PATRICK GENE, Vicksburg. Born Jackson, Miss., Oct. 23, 1930; M.D., University of Mississippi School of Medicine, Jackson, 1958; interned University Medical Center, Jackson, Miss.; ophthalmology residency, Tulane University School of Medicine, New Orleans, La.; one year; First Lieutenant U. S. Army, two years; elected July 12, 1960, by West Mississippi Medical Society.

SEGARS, KELLY SCOTT, Iuka. Born Red Bay, Ala., March 11, 1930; M.D., University of Mississippi School of Medicine, Jackson, 1959; interned United States Public Health Service Hospital, Norfolk, Va.; First Lieutenant U. S. Army, two years; elected Dec. 13, 1960, by Northeast Mississippi Medical Society.

SHARBROUGH, RICHMOND FRANCIS, Vicksburg. Born Holly Bluff, Miss., Sept. 13, 1930; M.S., Tulane University School of Medicine, New Orleans, La., 1955; interned The Street Clinic, Vicksburg, Miss.; anesthesiology residencies, University Medical Center, Jackson, Miss., one year, Charity Hospital, New Orleans, La., one year; Captain U. S. Army, two years; elected Oct. 11, 1960, by West Mississippi Medical Society.

WILLIAMS, JOHN CLARK, Vicksburg. Born Troy, Mo., Sept. 28, 1927; M.D., Louisiana State University School of Medicine, New Orleans, 1957; interned University Medical Center, Jackson, Miss.; internal medicine residency, University Medical Center, Jackson, two years; Colonel U. S. Army, two years; elected Oct. 11, 1960, by West Mississippi Medical Society.

WINKLER, MARION MAYERS, JR., Tupelo. Born New Orleans, La., Sept. 18, 1930; M.D., Tulane University School of Medicine, New Orleans, La., 1955; interned Confederate Memorial Medical Center, Shreveport, La.; pediatric residencies, University Medical Center, Jackson, Miss., one year, St. Louis Children's Hospital, St. Louis, Mo., one year; Captain U. S. Army, two years; elected Dec. 13, 1960, by Northeast Mississippi Medical Society.

PERSONALS

D. T. AMACKER was recently elected president of the newly formed North Meridian Optimist Club. Dr. Amacker was instrumental in the group's organization.

W. H. ANDERSON of Booneville, JIM C. BARNETT of Brookhaven, and W. T. OAKES of Ackerman, have been elected directors of the Mississippi State Chamber of Commerce-MEC for a three year term beginning May 1.

ORLANDO J. ANDY of Jackson is serving as the new president of the Eastern Electroencephalographic Society.

E. A. ATTIX of Hattiesburg has announced his association with the Landry-Gonzalez Clinic in Lucedale. Dr. Attix, an orthopedic surgeon, will have office hours in Lucedale on Thursday by appointment only.

CHARLES E. BELL AND WALTERINE H. BELL have been named county health officers of Grenada, Tallahatchie, Yalobusha, Montgomery, and Carroll counties.

ROBERT F. CARTER, JR. of Pascagoula has completed residency in urology at the Alton Ochsner Medical Foundation, New Orleans, and has entered private practice in association with George W. Vickery at Gulfport.

EDWIN H. COLE, administrator of the South Mississippi Charity Hospital, was named Laurel's Outstanding Young Man of 1960 at the annual awards dinner of the Laurel Junior Chamber of Commerce.

J. P. CULPEPPER of Hattiesburg represented the AMA and the Medical Advisory Board at the December dedication of the new medical center in Dover, Tenn.

JAMES S. FISACKERLY has announced the opening of his office in Biloxi for a practice limited to eye, ear, nose and throat.

R. L. FOWLER of Marion celebrated his 90th birthday on Jan. 21. Dr. Fowler, who still has a large office practice, has been in medicine 57 years. His father was a physician and his son, Dr. Richard Fowler, is head of the department of pediatrics at the LSU School of Medicine.

A. J. GAVIGAN, Gulfport psychiatrist, has been appointed to the faculty of the University of Mis-

sissippi School of Medicine as an assistant professor of clinical psychiatry. For the past two years, Dr. Gavigan has been an instructor in the department of psychiatry. He will continue to practice in Gulfport since senior medical students obtain clinical experience in psychiatry at the Veterans Administration Hospital at Gulfport as well as the Mississippi State Hospital at Whitfield.

JACK GOODRICH AND ROBERT D. SLOAN of Jackson spoke at the fifth annual Southern Radiological Conference in January at Point Clear, Ala.

ARTHUR C. GUYTON of Jackson has been appointed to the American Heart Association policy committee. He is a former president of the Mississippi Heart Association.

JAMES HOWELL has announced his candidacy for mayor of Picayune. Dr. Howell is serving his second term as city councilman, the last four years serving as mayor pro-tem. He is a member of MSMA and a past president of Pearl River County Medical Society and Coast Counties Medical Society.

R. L. MCKINLY, Bay St. Louis, has given up his general practice of medicine to enter a residency in psychiatry at the Veterans Hospital, Gulfport.

DENNIS MAGEE has assumed his duties as the new health officer for Pearl River and Hancock counties.

SAMUEL O. MASSEY has been named to serve as president of the newly-organized Joint Civic Club Council in Picayune. The council will serve as a clearinghouse for club affairs and as a directing unit for cooperative projects. Dr. James M. Howell represents the Picayune Rotary Club on the Council.

GEORGE MOSS, Natchez, has been re-elected president of the YMCA board of directors. Dr. Moss will serve for a term of one year.

J. J. PITTMAN of Tylertown is the new president of the board of directors of the Walthall County Chamber of Commerce. Dr. Ben Crawford, also of Tylertown, has recently been named to the board. Dr. Pittman is also a new member of the Board of Directors of Mississippi Industries, Inc. The announcement was made by former Governor Hugh White, chairman of the board.

R. E. SCHUSTER AND CURTIS D. ROBERTS of the Brandon Clinic have opened an office in Pelahatchie for the practice of medicine. The office, located in the former Johnson Clinic, is open from 1 p.m. to 4 p.m., Monday through Friday.

GEORGE SMITH was named the recipient of the Ocean Springs Jaycees' Distinguished Service Award as the outstanding young man of the year.

CLIFFORD TILLMAN, Natchez, is a district chairman for the State Heart Fund, according to Rubel Phillips, chairman of the fund.

MYRA TYLER AND WATTS WEBB from the University of Mississippi School of Medicine spoke to the fifth annual Tri-State Consecutive Case Conference in January. The conference, which met in Biloxi, is sponsored by the Mississippi, Alabama, and Louisiana Tuberculosis Associations and the Trudeau Societies from these states.

W. M. WOOD of Carthage has been named to the board of directors of the Mississippi State Cancer Society. He was appointed for a one-year term.

DEATHS

COOK, GLENWOOD LEBANON, Laurel. M.D., Hahnemann Medical College, Philadelphia, Pa., 1939; interned U. S. Naval Hospital, Portsmouth, Va.; radiology residencies, Colorado General Hospital, Denver, two years, Southern Baptist Hospital, New Orleans, La., one year; member, American Medical Board of Radiology and Mississippi Radiological Society; radiologist for Jones County Community Hospital, Masonite Hospital, Laurel, seven years; died Jan. 7, 1961, aged 50.

JOHNSON, STERLING KENDALL, Pascagoula. M.D., University of Tennessee College of Medicine, Memphis, 1936; interned Memphis Baptist Hospital, Tennessee; president, Central Medical Society, 1952; president, American Academy of General Practice, 1952; secretary, American Academy of General Practice, 1948-1951; chairman, Committee on Rural Health, MSMA; died Jan. 21, 1961, aged 50.

STAFFORD, BENJAMIN ALVIS, JR., Rolling Fork. M.D., University of Texas Medical College, Galveston, 1921; interned Sacramento Hospital, California; residency, Sacramento Hospital, California, one year; Sergeant U. S. Army, two years; member, American Public Health Association and Mississippi State Public Health Association; past president, West Mississippi Medical Society; died Jan. 27, 1961, aged 68.

AMA President to Visit Natchez March 27-28; Will Address 500 Medico-Civic Representatives

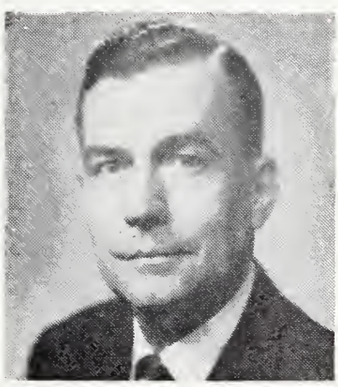
American medicine's top representative, Dr. E. Vincent Askey of Los Angeles, AMA president, will impart a medical flavor to the nationally famous Natchez pilgrimage when he and Mrs. Askey visit the city in March.



Askey

Dr. Askey will address a March 28 meeting of the Homochitto Valley Medical Society and all Natchez civic and service clubs—an estimated audience of 500. Other key medical figures who are expected to visit the pilgrimage city at the same time are Dr. Louis M. Orr of Orlando, Fla., AMA past president, and Dr. Leonard W. Larson, Bismarck, N.D., president-elect.

The AMA officials' two-day visit will begin Monday, March 27, with the historic Confederate Pageant which this year commemorates the centennial of the War between the States. Following the pageant, Dr. G. Swink Hicks, president of MSMA, and Mrs. Hicks will honor their daughter, Miss Anne Marie Hicks, Natchez Garden Club Queen for the 1961 Pilgrimage, with a reception. The site of the party will be the Eola Hotel's Top of the Town Room.



Orr

On Tuesday, Dr. Askey will address the noon meeting of physicians and Natchez club members on medical affairs at the national level. His talk is expected to attract nation-wide attention.

Concurrently at noon, the Homochitto Valley Woman's Auxiliary will honor Mrs. Askey with a luncheon in the Old Carriage House Restaurant in Stanton Hall.

After an afternoon tour of pilgrimage homes, Dr. and Mrs. Askey will be honored by the Homochitto Valley Medical Society at Twin Oaks, antebellum home of Dr. and Mrs. Homer A. Whittington.

Dr. Askey has been a medical leader on the national level for a number of years. He has served as both vice speaker and speaker of the AMA House of Delegates as well as the 114th president of the association. Engaged in a practice limited to surgery, Dr. Askey is a Fellow in the American College of Surgeons and a Diplomate of the American Board of Surgery.



Larson

Natchez medical leaders are claiming a "first" for a 50 member county medical society: A local event attended by AMA's immediate past president, the incumbent president, and president-elect.

Wooley Addresses Central Medical Society

Scientific essayist for Central Medical Society's Feb. 7 meeting was Dr. O. B. Wooley of Jackson. Dr. Wooley spoke on "Toxemia of Pregnancy."

At its Jan. 3 meeting, the society received annual reports from 16 committees and voted in seven new members.

During the scientific session, three papers were presented. Dr. Lawrence W. Long spoke on "Use of Colchicine in Carcinomatosis," Dr. John Kitchings discussed "Endometriosis," and Dr. Rush E. Netterville talked on "Present Problems of Empyema."

Mental Health Group Holds Annual Meeting

Members of the Mississippi Association for Mental Health convened in Jackson Jan. 30 for the group's fifth annual meeting. Theme of the day-long program was "New Horizons in Mental Health."



Panel members talk over their papers at the Jan. 30 meeting of the Mississippi Mental Health Association. From left to right are Dr. W. L. Jaquith, who spoke on hospital treatment and care; Seth Hudspeth, moderator; Dr. Loyd Rowland, who discussed mental health services, and Dr. A. L. Gray, who talked on recent events in public health. Not shown are Miss Margaret Margrave, who took up mental health careers, and Dr. Floy J. Moore, who spoke on training hospitals. The panel was the main feature of the meeting's afternoon session.

Dr. Loyd W. Rowland, executive director of the Louisiana Association for Mental Health, was featured speaker for the morning session. He discussed police handling of mental patients and showed a film produced under his direction. The film—"Booked for Safekeeping"—concerned police management of excited mental patients.

During the afternoon session, five mental health leaders presented a panel discussion with Seth Hudspeth, chairman, Board of Mississippi Eleemosynary Institutions, serving as moderator.

The first speaker, Dr. A. L. Gray, State Board of Health executive director, discussed public health problems including radiation, water pollution, and mental health.

Miss Margaret Margrave, field representative of the National Association of Mental Health, spoke on mental health careers, and Dr. Rowland took up mental health services.

Talking on hospital treatment and care, Dr. W. L. Jaquith, director of the Mississippi State Hospital, pointed out that a 900 bed annex for Negro patients will be completed at the hospital in 1961, and that a unit for psychiatric training of state nurses is planned.

Dr. Floy J. Moore, chairman of the department of psychiatry, University of Mississippi School of Medicine, discussed training hospitals. He stated that the crux of the mental health problem is trained personnel and said that the university was presently planning a 27 bed psychiatric ward for training purposes.

At the close of the afternoon program, 1961 officers were elected. Dr. Donald B. Roark, Yazoo City, will serve as president and Dr. J. Moody McDill, Jackson, as first vice-president. Regional vice-presidents are Northern—George Payne Cossar, Charleston; Central—Mrs. S. K. Watson, Meridian; Southern—W. Joel Blass, Wiggins. Mrs. Robert Wood, Jackson, is secretary and Ray R. McCullen, Jackson, is treasurer. Mrs. Rachel Morehead of Jackson is the new executive director of the association.

Cardiac Clinic To Open in Vicksburg

The Mississippi Heart Association's first heart clinic for the medically indigent will open in Vicksburg within the next few weeks.

Spearheaded by Dr. Lucian Ferris and Dr. W. K. Purks, both of Vicksburg, the clinic is planned in cooperation with the Kuhn Memorial Hospital which is to furnish space, x-rays, and technical personnel.

Funds to buy necessary equipment, to pay a part-time secretary, and to defray operating costs will come from a heart association grant to the clinic's committee and from public health money obtained with the assistance of Dr. A. L. Gray, state public health chief and member of the heart board.

As presently envisioned, the clinic will operate for two hours one day each week, accepting a maximum of three new and eight returning patients each time. Patients may be referred from the entire state. The referring physician or a welfare or public health worker may certify indigency.

N. J. Doctors Held Liable For Hospital Acts

A new application of the doctrine of *res ipsa loquitur*—the thing speaks for itself—was allowed by a New Jersey court when a maternity patient sued attending obstetricians for a facial anesthesia burn. Although the anesthesia was administered by a hospital-employed nurse anesthetist, neither the institution nor the nurse was named in the complaint.

Attorneys for the physicians argued against the injury speaking for itself legally, contending that ". . . a showing of gross negligence by the defendants was requisite." The lower court dismissed the complaint, but the appellate court upheld it under *res ipsa loquitur,* stating that "if the apparently abnormal effect of the anesthesia on Mrs. Terhune's face was, in fact, a species of burning," then the plaintiff's proof should be allowed to show negligence by the anesthetist without expert testimony and thereby implicate the superiors (physicians) in liability.

Citation of the case is *Terhune v. Margaret Hague Maternity Hospital,* 164 A. 2d 75 (N. J., Sept. 23, 1960).

Culley Receives Certificate From Fifty Year Club



Dr. Billy S. Guyton, left, past president of the Mississippi State Medical Association, presents a Fifty Year Club certificate to Dr. John C. Culley, right. Both doctors are from Oxford. The presentation was made at the Jan. 5 meeting of the North Mississippi Medical Society.

State Nutrition Council Organized

Representatives from 30 state and private organizations met Jan. 26 in Jackson to set up the Mississippi Nutrition Council.

MSMA's representative to the council is Dr. David J. Van Landingham, Jackson.

The group, organized to coordinate the efforts of all groups interested in nutrition, studied objectives to be undertaken by the council and adopted three nutritional problems which need study.

The problems to be considered are between-meal snacks, optimum nutrition for teenagers and young adults and improving the food habits of the adolescent girl and boy in Mississippi, and reaching low income families with correct nutritional information.

The reactivation of the group was sponsored by the Mississippi Home Economics Association. Mrs. Mary Stansel Harvey, chairman of the Food and Nutrition Committee of the association, presided over the organizational meeting.

A nominating committee was chosen to select candidates for the offices to be voted in at the next meeting, scheduled for the last of April or first of May.

The committee is composed of Dr. W. D. Noblin, Mississippi State Board of Health; Mrs. Alice Babbington, Mississippi State Welfare Department; Miss Nova Stapp, American Dairy Council.

AMA Sets Conference On Physicians and Schools

Participants in the 1961 AMA Conference on Physicians and Schools will concentrate on child health needs, school health programs, and mental health, according to a preliminary announcement. The conference is scheduled for March 9-11 at the Chicago Sheraton Towers. It is sponsored by the AMA Department of Health Education.

During the opening session, leaders in medicine, education, and public health will outline the purposes of the conference. All other sessions will be devoted to consideration of the three major questions: child health needs and health education, the future of school health problems, and contributions of the home, school, and community to mental health.

This is the eighth meeting of the National Conference on Physicians and Schools.

AMA Representative Confers With MSMA Officials



AMA Field Representative Joe Miller, center, confers with MSMA officials Dr. Lawrence W. Long, left, and Dr. William E. Lotterhos, right, during a recent trip to Jackson. Dr. Long is president-elect and Dr. Lotterhos is secretary-treasurer. Miller also traveled to Hattiesburg and Meridian to talk with state medical leaders.

Court Rules Sanitarium Not Liable for Drowning

The Mississippi State Supreme Court in Jan. 23 action upheld the decision of a Hinds County Circuit Court and ruled that a sanitarium was not responsible for a patient's drowning when "reasonable care and attention" had been provided.

The damage suit was based on the alleged negligence of Oscar Johnson, owner of the Westhaven Sanitarium in Jackson. It was brought by Mrs. Lawrence Lyle and Miss Doris J. Nordie, daughters of Mrs. Mary Nordie, who was found drowned in a lake near the sanitarium June 5, 1958.

The plaintiffs charged error in the lower court's ruling on grounds that the judge erred in his instructions granted to the defendant as to the degree of care exacted of a private sanitarium, that the jury because of "passions and prejudices" disregarded the overwhelming weight of the evidence, and that the defense attorney allegedly made a prejudicial statement in the presence of the jury.

Said the court, "We do not believe Mrs. Nordlie was due any care above the reasonable care and attention required of a private sanitarium, because it is evident that the only additional care that could have been given her was either to put her under lock and key or to furnish her with a private nurse or attendant to constantly look after her.

"Mrs. Lyle did not contract for such a service," said the court, "and admitted that she did not expect the sanitarium to keep her mother under lock and key. The evidence further divulges that it was the custom of the attendants to lock the house at night to prevent intruders from entering the building."

The trial was affirmed by Chief Justice McGehee, with Justices Lee, Kyle and Gillespie concurring.

New Doctor-Lawyer Guide Adopted in Chicago

Chicago's physicians and attorneys-at-law reached a new high in interprofessional liaison last month, according to reports by AMA's Legal and Socioeconomic Division to the Mississippi State Medical Association. Both the giant Chicago Medical Society and Chicago Bar Association representing nearly 10,000 doctors and lawyers adopted a new joint guide, "Standards of Practice Governing the Relationship Between Lawyers and Physicians."

Designed to provide a baseline for just, expeditious, and reasonable processing of medicolegal matters, the standards set ground rules for physicians' furnishing information from clinical records and reports with proper authorization, guaranteeing reimbursement for professional time expended. The agreement pointed out that ". . . it is understood (by attorneys) that the fee charged by the physician for his medical services does not take into account any further time or effort on his part in the event of . . . litigation," recognizing that it is proper for further fees to be charged where reports or testimony may be requested.

Copies of the new publication will soon be available to local medical societies in Mississippi for use as guides in establishing similar agreements with bar associations where desired.

Dr. Randall Named Assistant Dean

Dr. Charles C. Randall has been named an assistant dean of the University of Mississippi School of Medicine in charge of graduate studies in the medical sciences.

Dr. Randall is professor of microbiology and chairman of the department, having come to the University of Mississippi Medical Center from Vanderbilt University School of Medicine in 1957. He serves as chairman of the graduate studies committee.

He is a graduate of the University of Kentucky and of Vanderbilt School of Medicine.

The School of Medicine has two other assistant deans, Dr. J. Robert Snavely, and Dr. Thomas Brooks, Jr., who is in charge of student affairs.

Dr. Pankratz Receives First Federal Award

Dr. David S. Pankratz, recently retired director of the University Medical Center and dean of the University of Mississippi School of Medicine, was one of three recipients of the 1961 First Federal Foundation Awards.

The other two went to Dr. Willard F. Bond, who retired in 1956 after 61 years of public service including state superintendent of education and commissioner of public welfare, and Mrs. Ellen S. Woodward, who retired from public service in 1954 when she was serving as director of the Office of Inter-Agency and International Relations in the Federal Security Agency.



Dr. David S. Pankratz accepts the First Federal Award presented him Jan. 21 for outstanding service to Mississippi.

Dr. Pankratz, who is now associated with a neuropsychiatric unit in Memphis, had been associated with the University of Mississippi for 22 years prior to his retirement in January. He was a guiding force in the successful effort to establish a four-year medical school and build a multi-million dollar Medical Center.

Active in many volunteer health organizations, Dr. Pankratz served as president of the Mississippi Division of the American Cancer Society and on the board of the Mississippi Heart Association and the Mississippi Association for Mental Health.

The First Federal Foundation was established by First Federal of Jackson in 1958 to enable the University of Mississippi to pay tribute to outstanding Mississippi. Three awards are given annually. The 1961 awards, the third series, were presented Jan. 21 before an overflow crowd of top state officials and civic leaders.

Guest speaker for the evening was Dr. Robert C. Anderson, director of the Southern Regional Educational Board. Dr. Anderson, soon to become vice president of Auburn University in Alabama, emphasized the need for the South to provide higher education second to none in the nation for its young people.

"The South is going to need all of the real leadership it can find within the next two or three generations. . . . Higher education can produce the leadership to push forward the region's development," he said.

The awards were presented by Governor Ross Barnett and University Chancellor Dr. J. D. Williams. Dr. W. Douglas Hudgins, pastor of the First Baptist Church in Jackson, gave the invocation.

National Foundation Releases Teaching Film

The National Foundation has announced the availability of a new teaching film, "Medical Genetics—Part I."

The film was prepared by Dr. Victor A. McKusick and his associates in the department of medical genetics, the Johns Hopkins University School of Medicine. It covers (1) historical development, (2) the physical basis of inheritance, (3) some chromosomal abnormalities in man.

Executives' Forum Meets in Jackson

The Mississippi Association Executives' Forum held its 1961 Annual Meeting on Jan. 31 in Jackson. Approximately 50 members were present.

Attending from MSMA were Rowland Kennedy, executive secretary, Charles Mathews, assistant executive secretary, and Mrs. Jo Ingram, comptroller. Kennedy was president of MAEF for 1960.

The day-long program consisted entirely of discussion led by Glenn E. Jackson of Pompano Beach, Fla. Jackson, consultant for the American Orthotics and Prosthetics Association, is nationally known for his ability to lead creative discussions among people in association work.

During the business session Ben Davis, executive vice president of the Mississippi Forestry Association, was named president and Charles Fulghum, executive vice president of the Mississippi Manufacturers Association, was chosen president-elect. B. F. Smith of Stoneville, executive vice president of the Delta Council, was elected secretary.

Rochester, N. Y., Initiates Home Care Plan

The major health and welfare agencies in Monroe County, Rochester, N. Y., have recently joined in a county-wide home care plan. The program provides comprehensive nursing, social, rehabilitative, and other supportive services to patients at home under the direction of private physicians.

The new program, extended to patients regardless of financial status, is one result of a two-year survey of chronic illness prevalence and needs in the county conducted by the Council of Social Agencies of Rochester and the County Board of Supervisors. The survey showed a significant number of patients in hospitals and nursing homes who could return home if organized supportive services were made available.

An independent agency, the Home Care Association, has been set up to administer the program. Almost all public and private health agencies in Monroe County are represented. Each hospital in the area which inaugurates a home care service will also have representation.

Grants to the program came from the state health department and a local philanthropic organization. Additional support is expected from the Council of Social Agencies and the local Community Chest. The program, however, will be operated as far as possible on a "pay-as-you-go" basis, with patients paying according to their ability and funds from the welfare department for assistance cases. Physicians will be reimbursed directly by their patients or by the Home Care Plan when patients are unable to pay.

The Rochester Hospital Service Corporation (Blue Cross) has agreed to develop a program similiar to New York City's by extending benefits to care received in the patient's home, providing there is a prior period of hospitalization. Depending on a change in the state insurance law, Blue Cross may extend benefits to subscribers without previous hospitalization. The local Blue Shield Plan is considering the possibility of including home care benefits in its standard contracts without raising rates.

U. S. Doctors Give $2 Million in Care Daily

"The debates regarding medical care for the aged seem to ignore the physician." This was the statement of the Michigan State Medical Society in its new socioeconomic publication, *Currents,* a graphic newsletter initiated late last year and in its fourth month of issue.

Michigan studies indicate that American physicians in private practice actually give $658 million in medical care annually without charges to those unable to pay fees. General practitioners, the studies disclose, give $277 million in services while specialists donate $381 million. This amounts to an annual gift of about $3,360 on the part of each general practitioner in private practice and $4,812 for each specialist.

The huge amount of gratuitous professional services are divided into four categories. The largest is that of private patients treated without charge, 39.9 per cent. Hospital ward care is 26.5 per cent and outpatient clinic service comes to 22.7 per cent. The last and smallest category is a miscellaneous 10.9 per cent which groups services without charges to students, campers, Boy Scouts, amateur athletes, blood donors, miscellaneous charity cases, clergymen, physicians' families, and emergencies.

Twenty-Two Attend Auxiliary Board Meeting

Twenty-two officers attended the Feb. 1 meeting of the Woman's Auxiliary Executive Board, held at MSMA headquarters.



Officers of the Woman's Auxiliary confer before the Feb. 1 executive board meeting. From left to right standing are Mrs. John Egger, president-elect; Mrs. Eldon Bolton, co-chairman for the 93rd Annual Session, and Mrs. James T. Thompson, chairman of the Annual Session. Mrs. Lee R. Reid, president, is seated.

Main feature of the program was a talk by Dr. George E. Twente on the January White House Conference on Aging.

Mrs. Lee R. Reid, Jackson, auxiliary president, presided over the meeting. These chairmen reported on the work of their committees: Mrs. John Bise, Jackson, nurse loan; Mrs. Arthur Brown, Columbus, AMEF, and Mrs. H. H. McClanahan, Jr., Columbus, Legislative.

Mrs. A. T. Tatum, Petal, a member of the Revisions Committee, read the proposed changes in the by-laws of the auxiliary which were unanimously approved by the board.

Plans for the 93rd Annual Session were discussed by Mrs. James T. Thompson, Moss Point, chairman, and Mrs. Eldon Bolton, Biloxi, co-chairman.

Other auxiliary members present at the meeting were Mrs. F. E. McCullough, Jackson; Mrs. Jack Daniel, Hattiesburg; Mrs. L. T. Carl, Jackson; Mrs. H. C. Ricks, Sr., Jackson; Mrs. Frank Massengill, Brookhaven; Mrs. Frank Donaldson, Jackson; Mrs. John Egger, Drew; Mrs. Wendell Holmes, McComb; Mrs. T. A. Baines, Jackson; Mrs. William Crowson, Clarksdale; Mrs. J. P. Culpepper, Hattiesburg; Mrs. E. A. Trudeau, Biloxi; Mrs. Augustus Street, Vicksburg; Mrs. Verner Holmes, McComb, and Mrs. Steve C. Leist, Clarksdale.



Woman's Auxiliary officers and society presidents pause during their Feb. 1 meeting for JOURNAL MSMA*'s camera. Mrs. Lee R. Reid, auxiliary president, is presiding. Twenty-two officials attended the meeting which was held in the conference room at MSMA headquarters.*

AMA Board Protests CBS Show

The Board of Trustees of the American Medical Association has accused the Columbia Broadcasting System of "misrepresentations, bias, and distortions" on the Feb. 2 television show, "CBS Reports."

The board, meeting in Chicago, sent a letter of protest to CBS President Frank Stanton over handling of the show, "The Business of Health: Medicine, Money and Politics."

MSMA officials have concurred with AMA in denouncing the program. A memorandum to component societies and officers states, "The entire program was little more than a series of patent distortions and out-of-context references to the circumstances under which medical care is provided by American physicians and the manner in which charges are made." Mississippi physicians were urged to write letters of protest to CBS President Frank Stanton.

In a letter to Dr. Stanton, MSMA Executive Secretary Rowland B. Kennedy wrote, "We protest vigorously the content of your program . . . it appeared to be biased heavily in favor of those who advocate removal of American medical service from the private sector to the federal area. American physicians, through medical organization, have supported and endeavored to cooperate with the television industry. All they ask is an opportunity to discuss their views on issues of this nature on a basis of equality with those of differing positions."

In another action, the AMA Board issued a statement declaring:

"The medical profession, which has dedicated itself unceasingly for generations to advancing the medical arts and skills toward the continuing goal of better health for all people, was profoundly shocked at the caricature of medicine and its aims on 'CBS Reports.' "

The hour-long program dealt primarily with various health-care plans and how they are financed and touched on the developing controversy over medical care for the aged.

The AMA board declared that the show was a "monumental travesty on the medical profession" and was filled with "misrepresentations, bias, and distortions from beginning to end."

The AMA, the statement said, was given no opportunity to develop its position that "the medical profession has always believed that every person, young or old, in need of medical care should get it, regardless of ability to pay."

"Last year alone," the board members said, "physicians of this country gave more than $658 million in free medical care.

"The AMA believes that any medical care plan is both unsound and unfair which would compel America's working people to shoulder increased social security taxes to finance health costs of all those over 65, rich and poor alike regardless of whether they want or need such help and which, at the same time, ignores millions of indigent elderly who do need help.

"We are amazed that a major national television network, with its grave responsibility to safeguard the truth in examining the great issues of the day, would permit such a distorted program to be presented in the guise of objective reporting.

"We believe that CBS has performed an historic disservice to the people of this country."

The statement said that the AMA Chicago office had been flooded with hundreds of telephone calls, many of them from laymen, protesting the "misrepresentations in this program."

"It is deeply disturbing and disheartening to those of us who are informed about the manner in which this program was assembled that the real truth about AMA's position on medical care lies on some CBS cutting room floor," it said.

The board noted that Leonard W. Larson, M.D., president-elect of the AMA, at the request of CBS, had devoted five hours to taping questions and answers for the program.

"The test of fairness of the program, it seems to us," board members said, "could rest alone on the amount of time given AMA to present its views—a total of about four and one-half minutes out of the hour program.

"However, the lack of fairness was not confined to a question of time. The producer of the program selected the most unrepresentative quotes from AMA, twisted them out of context and positioned them in a manner most favorable to the friends of government medicine."

The board said that a commentator on the show represented that the AMA had cooperated with CBS in the production of the Thursday night program.

"Although the AMA assisted CBS in the belief the network intended to give the American people a thoughtful, balanced, and objective examination of the myriad problems of medical care for our citizens," the board said, "the result made a dismal mockery of AMA's cooperation."

Saskatchewan's Hospitals Admit Twice as Many, Keep Them 2½ Times as Long as Indiana's

Canadians in Saskatchewan, under Forand-type socialized medicine, are admitted to a hospital twice as often and stay two and a half times as long as their American neighbors in Indiana in the same age groups with the same medical diagnoses. These are the findings of the Health Information Foundation, nonprofit socioeconomic research organization sponsored by the American pharmaceutical industry.

New studies, just released, compared almost identical actuarial groups of just under one million persons in Indiana and Saskatchewan. The Indiana group was protected by Blue Cross and the Canadians by the Saskatchewan Hospital Services Plan of the Medical and Hospital Services Branch, Provincial Department of Public Health. The Canadian plan is a tax-supported, compulsory health program at the province's federal level. In Indiana, the group consisted of 843,046 persons owning Blue Cross comprehensive contracts, a segment estimated at about one-fifth the state population. The Saskatchewan group included 827,698 persons, 94.2 per cent of the total population.

HIF's studies were made from actual case records and classified according to the standard *International Statistical Classification of Diseases, Injuries, and Causes of Death.* Some adjustment was allowed for the Canadians' "unfavorable" age-sex composition to effect an alignment similar to Indiana's.

Blue Cross subscribers had an annual hospital admission rate of 115.5 per thousand while the Canadians' rate was 208.8 per year. Average inpatient stay in Indiana was 7.3 days against 10.1 in Saskatchewan. Hoosiers under Blue Cross used 838.8 hospital days per 1,000 population each year while their dominion neighbors needed

Selected Measures of Hospital Utilization by Diagnosis

Indiana Blue Cross, 1956, and Saskatchewan, 1957*

Diagnosis	"C" List Numbers	Indiana Blue Cross			Saskatchewan		
		Admissions per 1,000 population	Average length of stay (days)	Annual days per 1,000 population	Admissions per 1,000 population	Average length of stay (days)	Annual days per 1,000 population
ALL DIAGNOSES		115.5	7.3	838.8	208.8	10.1	2,107.3
Infective and parasitic diseases	1-11	1.6	11.1	17.1	3.4	10.9	36.6
Tuberculosis (all forms)	1-2	.3	17.4	4.4	.1	15.1	1.6
Malignant neoplasms (cancer)	12	2.3	15.5	36.2	5.1	27.8	140.6
Benign and unspecified neoplasms	13	3.6	5.1	18.3	4.6	11.0	50.2
Allergic and metabolic diseases	14-17	2.8	9.4	26.4	6.9	12.7	87.2
Diabetes mellitus	16	1.1	12.3	13.3	2.4	16.1	39.1
Diseases of the blood, etc.	18	.5	7.3	3.4	.8	14.5	10.9
Mental disorders	19	1.5	15.5	23.7	2.9	15.4	45.3
Diseases of the nervous system	20-22	2.3	10.1	23.4	6.5	15.3	99.0
Vascular lesions affecting CNS	20	.7	19.3	12.5	2.3	28.1	63.8
Diseases of the circulatory system	23-27	6.8	11.8	80.0	11.8	16.7	197.7
Diseases of the heart	24-26	3.3	14.7	49.0	8.1	18.2	147.2
Diseases of the respiratory system	28-34	18.7	3.4	64.2	43.2	6.1	262.0
Upper respiratory diseases	28-29, 34	14.2	2.2	32.0	20.9	4.1	84.8
Influenza	30	.3	5.4	1.6	7.0	5.7	40.4
Pneumonia	31	3.0	7.8	23.1	10.0	9.9	99.0
Bronchitis	32	1.2	6.2	7.5	5.3	7.1	37.7
Diseases of the digestive system	35-40	18.0	8.1	145.3	27.9	9.5	263.9
Appendicitis	36	3.4	6.1	20.5	4.9	8.9	43.2
Hernia of abdominal cavity	37	3.1	7.1	22.1	3.2	12.1	39.3
Diseases of the gall bladder	39	2.9	10.8	30.7	4.7	12.1	56.8
Diseases of the genitourinary system	41-42	10.2	6.9	70.1	10.6	11.4	121.8
Obstetrical care	43	24.0	4.6	109.5	36.4	6.6	239.8
Diseases of the skin, etc.	44-45	1.5	7.9	11.8	5.0	9.0	45.1
Diseases of the bones, etc.	46-47	3.6	10.4	37.9	7.1	13.9	98.6
Congenital malformations and early-infancy diseases	48	2.6	13.8	35.5	2.1	14.9	30.8
Other specified and ill-defined conditions	49	8.3	8.8	73.0	18.0	11.8	212.4
Accidents, poisonings, and violence	50	7.2	8.7	63.0	16.5	10.0	165.4

*Comprehensive II Certificate of Membership, Blue Cross Hospital Service, Indiana; and Saskatchewan Hospital Services Plan, Saskatchewan, Canada.

2,107.3 days. On a percentage basis, the Canadians stayed in the hospital 38 per cent longer and used 251 per cent more patient days annually.

In the key age group of 65 and over, almost 10 per cent of the Canadian utilization was by seniors against only 2.7 per cent in Indiana. Other age groups at a rate of about 50 to 85 per cent higher in Saskatchewan than in Indiana. Under Blue Cross, the most significant admission was for obstetrical care at 24 per 1,000 population followed by respiratory diseases, digestive system disorders, GU conditions, and a category of accidents, poisonings, and violence. The same major grouping made up the Saskatchewan experience.

Researchers said that their findings were not an attempt to judge which rate is "correct" despite the comparison having been made between voluntary prepayment and socialized medical service groups.

State Society Hosts Anesthesiologists' Meet

The Mississippi Society of Anesthesiologists will host the Sixteenth Annual Session of the Southern Society of Anesthesiologists to be held March 9-11 in Jackson. Meeting headquarters will be the King Edward Hotel.

In addition to the scientific sessions and business meetings, the program includes trips to Natchez, Vicksburg, and historic Jackson landmarks, according to Dr. Curtis Caine, Jackson, chairman in charge of general arrangements.

On Wednesday evening, March 8, the group will visit Vicksburg to see "Gold in the Hills" aboard the Steamer Sprague. During the regular meeting, the wives will have an opportunity to visit the Governor's Mansion and the State Historical Museum.

A post-convention tour to Natchez is scheduled for Saturday, March 11, including five plantation estates and the Pageant of the War between the States.

The program proper will begin Thursday morning, March 9, with a welcoming address by Governor Ross R. Barnett. The response will be given by Dr. Clarence H. Webb, Jr., president of the Mississippi Society of Anesthesiologists.

Twenty-two scientific papers are scheduled for the Thursday, Friday, and Saturday scientific sessions. Round table luncheons will be held on Thursday and Friday, and the annual banquet and dance is scheduled for Friday evening. New officers will be elected Saturday morning following the president's address by Dr. Arthur S. Keats of Houston, Texas.

Committee chairmen in charge of the annual session are Dr. Caine, general arrangements; Dr. Webb, exhibits; Dr. Thomas J. Marland of Jackson, publicity, and Mrs. Curtis Caine, ladies activities.

Papers to be presented by attending physicians include:

Thursday morning: "The Phenomenon of Insulin Hypernarcosis" by J. B. Kahn, New Orleans, La.; "Intravenous Analgesia for Heart Surgery" by Jacob Wachtel, Norwich, Conn.; "High Flow Rates and Other Nonsense Concerning Apparatus for Inhalational Anesthesia" by Gordon Gates, John Adriani, New Orleans, La.; "Some Unusual Anesthetic Problems and Complications" by Philip Jones, Milwaukee, Wis.; "Clinical Experience with Carbocaine in Regional Anesthesia" by Perry P. Volpitto and Zachariah W. Gramling, Augusta, Ga.; "Fluothane Anesthesia for Bronchoscopy and Bronchography" by Leonard W. Fabian, Jackson, Miss.; "Clinical Experiences with a Fluorinated Ether—Methoxy Flurane" by H. Malcolm Hardy, Kansas City, Kan.

Thursday afternoon: "Clinical Studies of Trifluoroethylvinyl Ether (Fluoromar) Anesthesia" by W. H. L. Dornett, G. L. Miller, W. E. Sheffield, R. J. Cavallaro, Mary Frances Poe, Memphis, Tenn.; "The Relationship of the Volume of Solution to Spread and Intensity of Peridural Anesthesia" by Oral B. Crawford, Springfield, Mo.; "Myocardial Infarction—Is Hypotension during Surgery a Precipitating Factor?" by G. Papadopoulos, W. H. Mannheimer, Arthur S. Keats, Houston, Texas; "Hypnosis in Obstetrical Anesthesia" by M. M. Tinterow, Wichita, Kan.; "The Use of Dichloroisoproterenol to Prevent and Correct Ventricular Arrhythmias Resulting from Administration of Norepinephrine to Dogs Anesthetized with Cyclopropane" by Lawrence G. Schull,



Nashville, Tenn.; "The Circulatory Effects of Methoxyflurane (Penthrane) by William C. North, Paul R. Knox, C. R. Stephen, Durham, N. C.

Friday morning: "Regulation of Venous Return" by Arthur C. Guyton of Jackson, Miss.; "Mode of Action of Digitalis—Newer Concepts" by William Holland of Jackson, Miss.; "Problems in Burns of Interest to the Anesthesiologist" by Curtis P. Artz of Jackson, Miss.; "Recent Developments in the Use of Fluorocarbon Anesthetics" by Leonard W. Fabian, Jackson, Miss.

Saturday morning: "The Response to Neuromuscular Blocking Agents in the Young and in the Aged" by Arthur S. Keats and Jane R. Telford, Houston, Texas; "Screening and Acceptance of New Drugs" by John Adriani, New Orleans, La.; "Explosions and Explosion Hazards in the Operating Room" by Kenneth E. Bray, New Orleans, La.; "Lucaine for Obstetrical Anesthesia" by Jerry R. Miller, Indianapolis, Ind.; "Subarachnoid Alcohol Block in the Control of Intractable Pain" by Richard C. Hay of Houston, Texas.

State Heart Group Plans Annual Seminar

Five outstanding scientists and an award winning science writer will be the guest speakers for the Eighth Annual Cardiovascular Seminar.

Supported by the Mississippi Heart Association, the program is planned for April 5 through 7 and will be held at the University Medical Center.

Featured speaker for the MHA annual dinner meeting on April 6 will be Robert P. Goldman of New York. Goldman, whose articles regularly appear in *Parade Magazine,* last year won a Blakeslee award for his writing in the cardiovascular field. He authored a Jan. 22 *Parade* story entitled "Some Doctors Think Heart Attacks Can Be Prevented."

During the dinner, which is held in conjunction with the seminar, awards will be presented and new officers and directors elected. General A. G. Paxton of Greenville is to move up to the presidency, succeeding Dr. J. Manning Hudson of Jackson.

Guest lecturers for the seminar will include Dr. Irving Wright, former president of the American Heart Association, who pioneered in the modern study and treatment of peripheral vascular diseases.

Other speakers are to be a pediatrician, Dr. James DuShane of Mayos; a physiologist, Dr. Lysle Peterson of the University of Pennsylvania; a surgeon, Dr. Claude Beck of Western Reserve, and a second internist, Dr. Sterling Nichol of Miami.

Dr. Raymond Grenfell of Jackson is chairman of MHA's Professional Education Committee which planned the seminar. Dr. D. J. Van Landingham of Jackson is chairman of the Awards Committee and Dr. W. K. Purks of Vicksburg is chairman of the Nominations Committee.

Graduates Return For UMC Day

Graduates of the University of Mississippi School of Medicine returned to their alma mater Feb. 2 for the second annual UMC Day.

Expanded from a half day to a full day's program, the activities included professional papers and hospital rounds. Dr. Hebbel Hoff of the physiology department at Baylor University served as guest speaker for the homecoming crowd of doctors who graduated from the university or took their internship or advanced training at the University Training Hospital.

Registration and a coffee hour started the day as former schoolmates met to catch up on each other's activities. Pediatric walk rounds and medical grand rounds were scheduled for the morning.

The UMC's newly-developed electrical anesthesia was the subject of a film shown during the afternoon surgical grand founds. Obstetrical-gynecological grand rounds were also a part of the afternoon's activities.

Papers by two UMC department heads were on the morning program. Dr. William C. Holland, chairman of the department of pharmacology, discussed new concepts in the cardiovascular effects of digitalis. Dr. Thomas J. Brooks, Jr., chairman of the department of preventive medicine, reviewed advances in the study of heredity in a paper entitled "The Preventive Medicine of Tomorrow."

The day's activities ended with an evening reception and dinner.

Gilmore Hospital Dedicated in Armory

The newest medical center in Northeast Mississippi—the Gilmore Memorial Hospital in Amory—was dedicated Jan. 22.

Medical figures on hand for the dedication services were Dr. A. L. Gray, state health officer, Dr. B. O. Moore, chief of staff of the hospital, and Dr. M. Q. Ewing, chief of staff of the old Gilmore Sanitarium which the new facility replaces.

The $812,000 institution was financed from funds of the Gilmore Foundation, established by Mr. and Mrs. Ellie Gilmore, and Hill-Burton state and federal funds. It was completely occupied by staff and patients the last of January.

Federal ADC Funds May Be Stopped

The seven-year-old federal-state cold war over Mississippi's "suitable home" provision incorporated in the state welfare laws came to a head as the new Kennedy administration took over.

Two days before he left office, U. S. Secretary of Health, Education and Welfare Arthur Flemming threatened to cut off federal funds to Mississippi for the Aid to Dependent Children program, if the law were not amended by July 1. His successor, Abraham Ribicoff, has made no statement on the situation to date.

Catalytic agent in the controversy was Louisiana which has removed 23,000 children from its welfare rolls because illegitimate children were born to mothers receiving welfare aid. The Louisiana law is patterned after a Mississippi law enacted in 1954 and revised in 1956.

It provides that payments be stopped to children whose mothers are living in illicit relationships or who have illegitimate children after going on relief rolls. Under the Mississippi law, families removed from state aid can be returned when proof has been presented to the county welfare board that a suitable home is being maintained.

The federal government, as represented by Flemming, feels that these restrictions bear no relationship to the children who need aid. Louisiana has been under federal fire for its efforts to curb illegitimacy by cutting off funds to mothers who bear children out-of-wedlock.

In Mississippi since 1954, 8,392 children have been removed from state aid rolls because their homes were found to be "unsuitable." Of that number, 4,333 have been removed because of birth of illegitimate children to mothers after the children went on the rolls or because of illegitimate pregnancy.

An additional 10,506 children have been denied aid because of "unsuitable" homes with illegitimacy or illicit relationships of the mother being the cause of "unsuitability" in many instances.

At the end of 1960, there were 20,068 families on the Aid to Dependent Children rolls, with a total of 61,265 children included. Seventy-four per cent of the families are Negro.

About $15 million is available for distribution to the state for the biennium. This comes from $3 million in a state appropriation and about $12 million from the federal government—or a 1 to 4 ratio.

The Welfare Department's policy is to contribute no more than 40 per cent of the total family budget in order to spread the funds through the 20,000 families.

No family may receive more than $90 per month. Aid is distributed on the basis of $25 for the first child, $15 for the second, and $10 for all others, up to the $90 total.

Payments for the last biennium averaged $36.39 per month for families and $11.92 per month for each child on the rolls.

State officials believe the law helps to discourage illegitimacy although the rate has gone up since 1954. That year there were 7,639 illegitimate births whereas in 1959 there were 8,091—and there was no overall population hike.

Under the 1960 state appropriations act, the state program will close down if and when federal funds are cut off.

Anesthesiologists Urge Uniform Color Code

The House of Delegates of the American Society of Anesthesiologists has urged that the United States change its standard color code for medical gas cylinders to comply with the international code.

The resolution, approved at the 1960 session of the ASA ruling body and published in the January issue of the society's newsletter states that in event of world crisis a single international color coding for medical gas cylinders would safeguard patients.

The international color code was adopted by the International Organization for Standardization in 1957. The American Standards Association, the Compressed Gas Association, Inc., the American Society of Anesthesiologists, Inc., and the American Hospital Association have recommended to the Commodity Standards Division of the United States Department of Commerce that the international code be adopted in the United States. The change would substitute white for green in oxygen tank coloring and violet for red in ethylene. Although the recommendations were made in 1957, no action has been taken to date.

The ASA resolution states that the delay was caused by "objections by certain gas manufacturers and distributors whose stated reasons are primarily related to inconvenience, allegedly less appealing appearance of cylinders, slightly increased cost for the consumer, and the advent of pin-indexing as the complete solution to the problem of confusing gases."

Public Spends Equally For Recreation, Health

The American public spends as much money for recreation today as for the sum total of all health care. This is the most recent finding of the Health Insurance Institute, a nonprofit organization devoted to research in the specialized casualty field of private health plans underwritten by domestic insurance carriers.

Of each dollar expended by Americans, about six cents goes for recreation while just under that amount goes for medical care on an average-per-capita basis. The average figure can, however, be misleading because health care expenditures are not spread evenly over the entire U. S. population. Data for the new study were compiled from personal consumption expenditure information collected by the U. S. Department of Commerce.

These figures show that Americans in 1959 spent $314 billion on their personal needs. Of this total, $18.3 billion, or 5.8 per cent, went for recreation, and exactly the same amount was spent on medical care.

In addition to the recreation expenditure, Americans spent $9.6 billion on alcoholic beverages and $7.0 billion on tobacco products, for a total of $34.9 billion on these three expenditures, or 11 per cent of all personal consumption expenditures.

Other public expenditures in 1959 included nearly $69 billion for food, more than $40 billion for housing, and $33 billion for clothing, accessories and jewelry.

Public spending for medical care, as a proportion of all personal spending, has not increased much in the past 20 years, said the Institute. In 1939, the public spent $67.6 billion for its personal needs including $2.8 billion, or 4.2 per cent of the total, on medical care, compared to 1959's nearly 6 per cent.

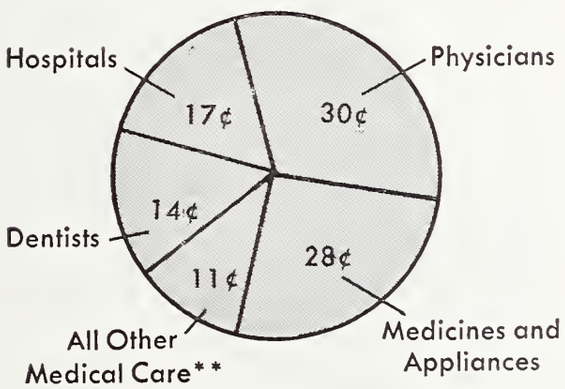
The institute said there have been sharp changes over the same period in the distribution of each dollar spent for medical care.

From each dollar spent for medical care in 1939, physicians received 30 cents, some 28 cents went for drugs and appliances, 17 cents went to hospitals, 14 cents to dentists, and 11 cents was spent on all other medical needs, which includes other professional services and nursing home care. In 1959, some 27 cents went to physicians, 26 cents for drugs and appliances, 30 cents to hospitals, 11 cents to dentists, and six cents for all other medical care. Expenses for health insurance were included in the distribution.

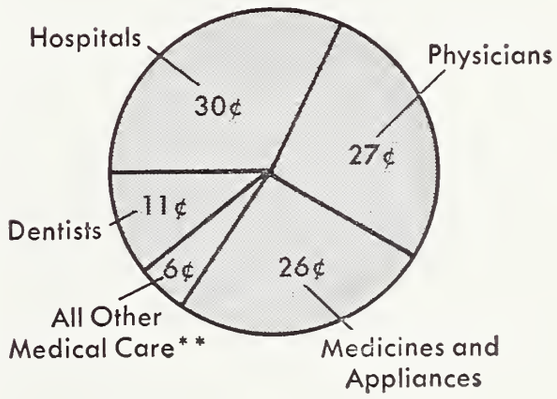
The $18 billion in medical expenditures—in addition to going for physicians, dentists, hospitals, and prescribed drugs—pay for nonprescribed drugs and medicines, eyeglasses, luxury hospital accommodations and all drug store purchases, includ-

DISTRIBUTION OF THE MEDICAL CARE DOLLAR*

TOTAL MEDICAL CARE EXPENDITURES
$2.8 Billion
1939



TOTAL MEDICAL CARE EXPENDITURES
$18.3 Billion
1959



* Includes expenses for health insurance.
** Includes other professional services and nursing home care.
SOURCE: United States Department of Commerce and United States Department of Health, Education and Welfare.

ing dentrifices, sunglasses, paper products and cosmetics. These expenditures represent the total medical care spending of both insured and non-insured persons in the U. S.

AMA Judicial Council Rules On Physician Censureship

The Judicial Council of the American Medical Association has ruled that the censureship of a physician for unethical conduct is a question of fact to be determined by the county society but warned that all charges should be tried efficiently and promptly.

The decision, reported in the Jan. 28 *Journal of the American Medical Association,* came in the case of Dr. Abel J. Leader. Dr. Leader appealed to the judicial council from a determination of the Texas Medical Association which affirmed a decision of censure for unethical conduct by the Harris County Medical Society.

The plaintiff was accused of unethical conduct through the use of allegedly intemperate language in a talk made before a nonmedical group in Houston, Texas, on July 8, 1958. The "intemperate" language allegedly violated the constitution and bylaws of both the Harris County Medical Society and the AMA.

At the time of Dr. Leader's talk, there had been considerable discussion in Houston and Harris County about the location of a new hospital. Some believed that it should be independent of Baylor University College of Medicine, while others believed it should be a part of the university system. The Harris County Medical Society, by official action, favored independence of the hospital, and Dr. Leader favored connecting the hospital and the university. In the speech in question, which was reproduced in its entirety by a local newspaper, Dr. Leader said:

"To me, the present activities of the medical society in this respect are most distasteful; it is almost like defiling a church. The physician who would knowingly do injury to a medical school, and there can be no doubt as to what is intended, differs little in my opinion from the man who beats his parents. He may be able to justify his actions, but I seriously doubt if he can!"

Some 16 months after the speech, the Harris County Medical Society found Dr. Leader guilty of unethical conduct and fixed the penalty at "censure." The Texas Medical Association upheld the Harris County Society's decision.

As the principal reason for his appeal to the AMA Judical Council, Dr. Leader asserted that he had the right as a citizen to express his personal convictions on what had become a public issue without fear of reprisal from his county medical society.

The Judicial Council ruled that membership in a medical society does not in any way curtail the right of free speech, but it demands that it be exercised in accord with the dignity of the medical profession.

It said: "Whether particular conduct fails to satisfy the demands placed on a physician in this regard is a question of fact to be determined by the county medical society according to the provisions of its own constitution and bylaws."

For this reason, the council ruled that the Harris County Medical Society was within its rights in finding Dr. Leader guilty of unethical conduct.

However, it pointed out that when there is a sharp difference of opinion within a medical society, every effort should be made to protect the rights of the minority. When, it said, an expression of opinion on a controversial issue results in a charge of alleged unethical conduct, it is important for the profession to try the charge efficiently and promptly.

Said the council: ". . . It seems from the record and from the facts which the council considered that the Harris County Medical Society could have worked more effectively in resolving this matter."



"This is a recorded message. You have dialed a wrong number. Why don't you call another doctor?"

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ORIGINAL PAPERS

Acute Pancreatitis: Diagnosis and Treatment With Case Report

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In its clinical symptoms, acute pancreatitis may simulate a variety of emergencies. Differential diagnosis, which is often difficult, must be accomplished quickly since the initial treatment of acute pancreatitis is usually medical whereas many of the conditions it resembles require early surgical management. The author discusses the history, etiology, pathophysiology, clinical features, and treatment of acute pancreatitis. Seven cases are presented, five of which received definitive surgery after subsidence of an acute episode or episodes.

ACUTE PANCREATITIS IS NOT a rare disorder. During the past 20 years the diagnosis of acute inflammation of the pancreas has become a more frequent achievement. This paper will report seven such cases, five of which were treated with definitive surgery following one or more episodes of acute inflammation. These cases will be reported in detail to illustrate the laboratory procedures in the differential diagnosis, the measures necessary for successful medical managment during the acute episode, and the importance of definitive surgery in preventing recurring episodes.

In 1889 Fitz in describing acute pancreatitis as an acute catastrophic inflammation of the pancreas, referred to those cases with associated necrosis and hemorrhage. Recent correlation of serum amylase determinations with operative or necropsy observations has permitted the recognition of less severe instances of acute pancreatitis with little or no necrosis. This has been designated acute pancreatic edema. The clinical signs and symptoms in this edema of the pancreas are usually much milder, the serum enzyme values lower, and the occurrence of a delayed hypocalcemia less likely than in acute hemorrhagic pancreatitis with necrosis. This acute edema is recognized most often in association with acute episodes of biliary tract disease. The mechanism that causes the acute edema may at times cause hemorrhage and necrosis of the pancreas, thus causing most physicians to believe that the edema, hemorrhage, and necrosis are stages of the same disease.

Biliary tract disease and/or excessive imbibing of alcohol cause acute inflammation of the pancreas in 80-90 per cent of the cases. Trauma to the abdomen or posterior penetration of gastroduodenal ulcers may occasionally be the causative agent. The association of biliary disease with acute pancreatitis makes it advisable to do routine serum amylase determinations in all patients with

Read before the regular meeting of the Tri-County Medical Society, Brookhaven, September 13, 1960.

biliary colic, since it is unwise to operate in the presence of acute severe inflammation of the pancreas. A pancreatic rest regime should be started immediately and a careful follow-up of the patient carried out.

COMMON-CHANNEL THEORY

Acute pancreatitis has been attributed to the reflux of bile from the common duct into the pancreatic duct. This "common-channel theory" received support by the demonstration of a "physiologic" common channel in about 90 per cent of more than 150 patients studied by Doubilet and Mulholland. Spasm of the sphincter of Oddi, a stone wedged tightly in the ampulla of Vater, or vigorous contraction of the gallbladder may cause this reflux of bile into the pancreatic duct.

These regurgitated bile salts produce necrosis of the pancreatic cells with release of pancreatic enzymes. Thus, trypsinogen is converted to active trypsin, and this breaks down tissue protein including the cell membrane of fat cells. The resulting fatty acids combine with calcium to form white opaque areas of fat necrosis, which helped to establish the diagnosis several years ago when immediate surgery was the treatment of choice.

This mobilization of calcium at times is manifested by a decrease in the calcium concentration in the blood serum. Besides the local release of pancreatic enzymes, there is a sudden rise in the serum concentration of amylase and lipase which presumably is the result of inflammatory block or obstruction to the flow of pancreatic juice from the pancreatic duct into the duodenum.

DIFFERENTIAL DIAGNOSIS

Clinically, acute pancreatitis may simulate a variety of acute medical and surgical emergencies. A definitive diagnosis is not possible by bedside examination alone. Onset is usually sudden with severe, steady pain in the epigastrium radiating toward the left, but the pain may be crampy and intermittent or dull and ill-defined, and it may arise in the lower abdomen, the lumbar region, beneath the sternum, or in the left lower chest. Differential diagnosis is often quite difficult and may simulate perforation of a peptic ulcer, a ruptured viscus, acute alcoholic gastritis, acute diverticulitis, basal pneumonitis with or without pleurisy, acute mesenteric occlusion, acute coronary occlusion, acute cholecystitis, acute appendicitis, and acute small bowel obstruction to mention only a few of the most common conditions. The clinical picture may be mild and go unrecognized particularly when the pancreatitis occurs in association with biliary colic.

Since the initial treatment of acute pancreatitis usually should be medical, whereas many conditions which it simulates require early surgical treatment, it is most important to make the correct diagnosis early. Fortunately the serum enzyme tests provide a ready means of differential diagnosis. In acute pancreatitis the serum amylase concentration is consistently elevated early and its value may be determined within one hour, whereas the serum lipase may be near normal for the first 48 hours but remains elevated for a longer period of time. Its determination requires a little more than 24 hours.

SERUM AMYLASE VALUES

The normal value of serum amylase in most laboratories is 40-140 mg. per cent of glucose and that of lipase is 1.1 cc. of 20th normal sodium hydroxide. A serum amylase value above 500 mg. per cent is almost always diagnostic of acute pancreatitis, whereas lower values than this may occur in posterior penetration of a peptic ulcer, free perforation of gastroduodenal lesions, acute inflammation of the salivary glands, renal failure with decrease in the excretion of amylase, intestinal obstruction, and peritonitis.

Marked hypocalcemia may occur on the fourth day or later when necrosis rather than only acute edema is present; usually the more necrosis the more hypocalcemia. Edmondson and Berne reported that if the serum calcium level was lower than 7 mg. per cent, the prognosis was hopeless. Marked electrocardiographic changes may occur in acute pancreatitis and are often due to disturbances in electrolyte balances such as hypopotassemia and hypocalcemia or to cardiac insult as a result of the associated shock-like state particularly in older arteriosclerotic patients.

At one time, one of the first objectives in the treatment of this condition was removal of the causative factor whenever possible. To accomplish this, immediate surgery was performed, this usually being cholecystostomy and drainage of the peritoneum overlying the pancreas. The decompression of the biliary tract was thought to reduce the probability of further reflux of bile into the pancreatic ducts. The mortality rate following immediate operation was above 50 per cent.

It is now generally agreed that immediate surgery is unwise except in the presence of suppuration, severe hemorrhage, or spreading peritonitis. However, surgery was carried out in the presence of acute pancreatitis with good results in one of the cases to be reported later.

The objectives then in the treatment of acute pancreatitis are:

1. To relieve pain and thereby the accompanying vasoconstriction to the pancreas.
2. To combat shock, dehydration, and electrolyte imbalances.
3. To suppress external pancreatic function by avoiding hormonal and nervous stimulation.
4. To perform definitive biliary tract surgery, if required, after convalescence from the acute attack.

Pain should be relieved as soon as possible, maybe even before definite diagnosis. Severe pain accompanied by vasoconstriction that is harmful to the myocardium may reduce pancreatic blood flow enough to convert simple edema to necrosis. Demerol, 100 mg., combined with atropine, 1/100 gr., every 2-4 hours seems to be most effective. Papaverine, 2 grs. intravenously; nitroglycerin, 1/50 to 1/150 gr., sublingually, or amyl nitrite pearls may be used to relax the sphincter of Oddi and thus prevent further reflux of bile into the pancreatic duct. Morphine should not be used because of its tendency to induce spasm in the sphincter of Oddi.

TREATMENT

At times these patients are so desperately ill that it is necessary to give plasma or blood transfusions and oxygen to overcome the shock as quickly as possible. They are permitted nothing by mouth and sufficient parenteral fluids with electrolytes are given to maintain good renal function and electrolyte balance. Diabetes mellitus is sometimes present temporarily when acute pancreatic necrosis exists. For this reason hypertonic glucose solutions are avoided and 10 units of regular insulin are given subcutaneously with each 50 gm. of glucose intravenously.

Food products and acid chyme are the most important stimuli of pancreatic secretion by the hormonal mechanism. Consequently, no food is allowed by mouth. A Levin tube and continuous Wangensteen suction is used with the tip of the tube maintained proximal to the pylorus in an attempt to reduce the passage of acid gastric juice into the duodenum. In addition, alkalies such as gelusil and amphojel are given every 1-2 hours to help suppress the hormonal phase of pancreatic secretion.

The nervous mechanism of pancreatic secretion is mediated by the vagus nerve. Measures used to avoid nervous stimulation are atropine, 1/60 to 1/120 gr., every 4 hours and Banthine or Probanthine. If either of the latter is used, it is usually necessary to have in place an indwelling urethral catheter. Obviously, drugs that stimulate the vagus nerves such as Prostigmin and Urecholine should be withheld.

Chemotherapy or antibiotic agents should be given prophylactically in an attempt to prevent suppurative complications. Blood calcium determinations should be carried out after the third day in the extremely ill patient and calcium gluconate, 10 cc. of 10 per cent solution, given intravenously one to three times every 24 hours if a calcium deficit is demonstrated.

GUIDES TO THERAPY

The clinical status of the patient determines the length of time the rigid type of therapy is to be carried out. The most important guides are recovery from shock, return of temperature to normal, drop in the leukocyte count, recedence of the physical evidences of inflammation, and return of the serum amylase level to normal or near normal. These patients have to be watched carefully to make sure that a complication is not developing that would require surgical intervention. Such conditions as hematoma, an acute cyst, a large suppurating mass, or spreading peritonitis require surgery. Unless the status of the gallbladder and biliary tract is known prior to the acute pancreatitis episode, these studies should be carried out as soon as the acute attack has subsided. If gallbladder disease, cholecystolithiasis, is present, operation on the biliary tract is advised. In fact, Doubilet advises section of the sphincter of Oddi and removal of the gallbladder even in the absence of demonstrable gallbladder disease. This surgery can best be carried out any time from one week to three weeks after subsidence of the acute attack but, as illustrated by one of the following case reports, can be carried out in the presence of acute pancreatitis.

USE OF STEROIDS

Since about 1955 there has been a good bit in the literature on the use of steroids—both cortisone and ACTH—in the treatment of acute pancreatitis. Kaplan of the department of medicine, Louisiana State University School of Medicine, in a paper entitled "ACTH and Cortisone in Gastroenterology" which appeared in the February 1957 issue of the *American Journal of Gastroenterology* stated that such cures are spectacular and dramatic and are in sharp contrast to the higher mortality rate and much slower recovery observed after routine nonsurgical therapy or surgical intervention. He reported a 100 per cent recovery in nine consecutive proved cases and

called attention to three similar cases in the literature. Since then, other articles have appeared. ACTH was used in one of the following cases and cortisone in another. These patients should be advised not to use alcoholic beverages for six-18 months after the definitive biliary surgery.

CASE REPORT 1

Mrs. A. D. R. was admitted to the Baptist Hospital on Feb. 5, 1952. She was a 44-year-old white female housewife. She denied the use of alcoholic beverages. I had done a left radical mastectomy and skin graft on her in November 1949, for adenocarcinoma with metastasis to three of the axiliary nodes. She was seen by me in July 1951, with the complaint of right upper quadrant pain and postprandial upper abdominal fullness and gas. Cholecystogram revealed cholelithiasis, and she was advised, but not urged, to have her gallbladder removed.

The cause of the Feb. 5, 1952, admission was sudden onset of severe upper mid-abdominal pain with vomiting. She was seen by her local medical doctor at 2:30 p.m. and given Demerol, 100 mg. and referred to me. On admission she was seen to be acutely ill, pale, and in much pain with a temperature of 98, pulse 80 and weak, and blood pressure of 90/70. Abdominal examination showed exquisite epigastric tenderness with some muscle guarding and generalized tenderness to less degree. Peristalsis was hypoactive. There was no discoloration of skin of abdomen or flanks. The extremities were cool, moist, and pale.

Admission blood count showed hemoglobin 80 per cent, red blood count 4,320,000, white blood count 10,300 with 90 polymorphonuclear leukocytes, and urine negative. Serum amylase was 1,466 and icterus index, 7.7. She was started on the pancreatic rest regime consisting of nothing by mouth, gastric continuous suction, parenteral fluids, oxygen, and antibiotics (Demerol, 100 mg., and atropine, 1/150 gr., every 4 hours). She was given 500 cc. of blood that afternoon.

On Feb. 6 she was much better with a temperature of 99, pulse 80, abdomen softer and less tender, serum amylase 1,215 units. On Feb. 7, serum amylase was 670 units. On this date there was a marked fall in the hemoglobin to 60 per cent and the red blood count to 3,140,000 and she was given 1,000 cc. of blood.

Blood calcium on Feb. 7 was 9.25 and on Feb. 8 it was 6.29 and she began to have tetany. She had been given calcium gluconate 10 cc. of 10 per cent intravenously daily since Feb. 6 and on Feb. 8 was given this amount three times a day and then as necessary for tetany. With each 50 mg. glucose she was given 10 units regular insulin subcutaneously.

The Levin tube was removed Feb. 11 which was six days after admission and on Feb. 12 she had recurrence of severe pain in the upper abdomen with temperature of 101.8 and pulse 106. She was anemic again and was given 500 cc. of blood on Feb. 11 and 12. After two to three days of rigid pancreatic rest regime, the tube was again removed. She was given water and then other liquids orally. On Feb. 18 she was started on a fat-free diet. On Feb. 21 the antibiotics were discontinued and on Feb. 22 she was sent home after being afebrile for one week to be readmitted in three weeks for definitive surgery.

She was readmitted at midnight, three days after discharge, with recurrence of severe upper abdominal pain. Again there was exquisite epigastric tenderness with a temperature of 100, pulse of 90, and blood pressure of 100/80. Amylase at this time was 1,762 units. She was given a rigid pancreatic rest regime again and improved rapidly. Two days later the serum amylase was 173 units and returned to normal in a few days.

She was kept in the hospital and given 500 cc. of blood on March 1 and 500 cc. of blood on March 10 because of moderate anemia. The gastric suction was discontinued on Feb. 29. She did well except for occasional bouts of pain and was operated upon on March 18, three weeks after the onset of the last episode.

At surgery there was no evidence of pancreatitis. The gallbladder wall was thickened and contained many small stones. It was adherent to the duodenum and pyloric end of the stomach. The gallbladder was removed and the sphincter of Oddi dilated by transduodenal approach since dilators could not be passed into the duodenum via common duct. A long (Cattell) T tube was left in and an operative cholangiogram was done and no stones seen.

She did well postoperatively. The Cattell tube was removed six months after surgery. Eight and one-half years have elapsed since this surgery and almost 11 since the breast cancer surgery. When seen a few weeks ago, she was quite well.

CASE REPORT 2

Mr. T. L. N. was admitted to the Baptist Hospital at 8:30 p.m. on Jan. 3, 1956. He was a 49-year-old white male executive with a history of heavy drinking fairly often and also of heavy eating. He had a sudden onset of anorhexia on the admission date followed in a few minutes with severe colicky pain in the left flank and vomiting of yellow material. He was more comfortable in the upright position. He had no radiation of pain. His temperature was 98.4, pulse 70, and blood pressure 120/80.

On examination he appeared to be a well-developed, well-nourished, obese white male. He complained of severe pain in his left flank. Examination of the abdomen showed moderate tenderness in the left upper quadrant of the abdomen and left flank. The liver and spleen were not felt. Peristalsis was high pitched but otherwise normal.

An electrocardiogram showed no evidence of recent insult. A KUB film showed no calculi. A chest

x-ray showed slight ventricular enlargement. Hemoglobin was 14.9 gm., red blood count 4,050,000, white blood count 8,900 with 76 polymorphonuclear leukocytes. Urine showed 3 plus albumin and 2-4 white blood cells per high-power field with no red blood cells. Serum amylase was 868. He was started on rigid pancreatic rest regime. He never improved and died on Jan. 5, 1956, 45 hours after onset. Shortly before death an epidural block was started by an anesthesiologist. The necropsy findings were:

1. Acute hemorrhagic pancreatic necrosis.
2. Fat necrosis—peritoneal and retroperitoneal fat.
3. Ascites.
4. Retroperitoneal hemorrhage, moderate.
5. Chronic cholecystitis.
6. Cholecystolithiasis—three large and many small.
7. Severe fatty metamorphosis of the liver.

Comment: It is questionable as to whether or not intravenous ACTH would have helped this man.

CASE REPORT 3

Mrs. E. H. A. was a 66-year-old white female admitted to the Baptist Hospital on July 18, 1956, with history of cramping and intermittent abdominal pain with sudden onset at 9:30 a.m. of admission date. She was vomiting white mucus-like material. She had had a similar illness one to two years previously lasting two to three days. She had a cholecystectomy in 1951, and the pathology report showed chronic cholecystitis and cholecystolithiasis, the stone being made up of multiple fragments of a yellow stone. The common duct was not explored.

On examination she was seen to be a well-developed, well-nourished, obese white female acutely ill. Her temperature was 98.6, pulse 76, and respiration 20. Her blood pressure was 110/80. Her abdomen showed a well-healed right subcostal operative scar. There was a thick panniculus with moderately marked tenderness about the umbilicus and in the left upper quadrant with no masses or palpable viscera. The peristalsis was hypoactive.

The laboratory procedures showed hemoglobin 12.8 gm., hemactocrit 39 volume per cent, white blood count 9,850 with 85 polymorphonuclear leukocytes. Urinalysis showed 1 plus albumin, sugar negative with a rare white blood cell. Serum amylase was 842 on July 19, the day after admission, and was 267 on July 20 and 31 on July 23.

The icterus index was 5.3 on July 23. She improved rapidly on the pancreatic rest regime and was quite comfortable at the time of her discharge on July 23. She was told to return in a few weeks for exploration of the common duct and dilatation or section of the sphincter of Oddi. An intravenous cholangiogram showed poor concentration of the dye in the common duct. The common duct appeared normal in size, and showed no stones.

Mrs. C. H. A. was readmitted in three weeks and at surgery on Aug. 21, 1956, the common duct was explored and found to contain four faceted stones. The duct wall was thickened and it was slightly dilated. The pancreas was normal to inspection and to palpation. The opening of the common duct into the duodenum was normal. Dilators were passed through the sphincter of Oddi into the duodenum and through a duodenotomy, a long T tube (Cattell) was passed through the common duct into the duodenum.

She did quite well postoperatively and was sent home on Sept. 1, 1956, to come to the office in three weeks. She was readmitted to the Baptist Hospital on Sept. 18, because of a sudden onset of severe upper abdominal pain with nausea and vomiting at 9 a.m. on that date. Against advice, she had been eating a regular diet along with other heavy eating members of the family.

Examination showed a temperature of 97.6, pulse 76, respiration 20, and blood pressure of 146/90. Her abdomen showed marked epigastric and left upper quadrant tenderness. Peristalsis was audible but hypoactive. The laboratory procedures showed hemoglobin 12.2 gm., 38 volume per cent hematocrit, white blood count 12,900 with 85 polymorphonuclear leukocytes. Urinalysis was normal and serum amylase was 1,239.

She was put on pancreatic rest regime and improved rapidly. The serum amylase returned to normal within 72 hours. Cholangiogram through the T tube showed two calculi—one in the left hepatic duct and the other in the common duct at the tip of the tube. She went home on Sept. 25, 1956, one week after admission, and the tube was removed three months later. She has been well since that time.

CASE REPORT 4

Mrs. A. K. G., a white female, was admitted to the Baptist Hospital on Nov. 25, 1956, with a history of right upper quadrant pain, mild, off and on for six months. She had had a severe episode one week before admission and then another severe one the day of admission. She had vomiting with these episodes. The pain radiated to the right and straight through to the back. On examination she had a moderate generalized tenderness, a little more marked in the right upper quadrant.

The laboratory findings showed hemoglobin 14.7 gm., hematocrit 43 volume per cent, white blood count 13,950 with 67 polymorphonuclear leukocytes. Urinalysis was negative, serum amylase, 921.

She was seen in consultation on Nov. 27, 1956. She was put on pancreatic rest regime and improved rather rapidly so that the serum amylase was normal in 72 hours. The Levin tube was removed in five days. She went home Dec. 8, 1956, after being afebrile for 10 days with instructions to return in one month for definitive surgery.

She was readmitted on Dec. 25, 1956, with the same complaint, this having been present for one week off and on when she was in the hospital in her home town. Examination revealed an acutely ill, young, white female complaining of rather severe

right upper quadrant pain. Her temperature was 98, pulse 90, respiration 24, blood pressure 120/80. Examination showed abdominal tenderness, marked right upper quadrant and less marked epigastric tenderness. Peristalsis was hypoactive. No palpable masses were felt.

The laboratory procedures showed her to have a hemoglobin of 12.5 gm., hematocrit 37 volume per cent, white blood count 14,650 with 87 polymorphonuclear leukocytes. Urinalysis was negative. Serum amylase was 95. She had a low grade elevation of temperature for eight days. During this time she had much right upper quadrant pain but no definite mass and no elevation of serum amylase. She was treated with rigid pancreatic rest regime for 72 hours and then with antibotics, sedation, and low fat diet, until surgery on Jan. 7, 1957.

At surgery the gallbladder was acutely inflamed and contained many multifaceted stones. The cystic and common ducts were small. The pancreas was normal and was not enlarged. A cholecystectomy was done after operative cholangiogram through a catheter in the cystic duct showed no duct calculi. The common duct was opened and Bakes graduated dilators passed into the duodenum followed by insertion of a long Cattell T tube.

This patient developed recurrent acute pancreatitis within hours after surgery, the serum amylase going to 1,081 the day after surgery. She was desperately ill for seven to 10 days following surgery but ultimately improved and went home on the 17th postoperative day after being afebrile for a week. The tube was removed after six months and she has remained well since.

Comment: Perhaps we should have been satisfied in the presence of acute cholecystitis in doing nothing more than a cholecystectomy since the operative cholangiogram showed no duct calculi.

CASE REPORT 5

Mr. L. L. W., white male retired farmer, age 78, was admitted to the Baptist Hospital on Feb. 11, 1957, as a patient of mine. He complained of severe epigastric and right upper quadrant abdominal pain with nausea but without vomiting that had begun at 9 a.m. the day of admission. He gave a history of recurring episodes of diarrhea for years for which a proctoscopic exam and barium enema had shown normal findings.

On examination he was seen to be an acutely ill, elderly white male with a temperature of 98.6, pulse 84, respiration 20, and with a blood pressure of 158/-80. The examination of the abdomen showed a McBurney appendectomy scar and there was marked mid-epigastric and right upper quadrant tenderness and slight generalized tenderness and spasm of the muscles of the upper abdomen. Peristalsis was audibly normal.

Laboratory procedures showed hemoglobin 15-2 gm., hematocrit 44 volume per cent, white blood count 13,700 with 84 polymorphonuclear leukocytes. A urinalysis was negative, serum amylase 508, bilirubin 0.7, icterus index 6.2, sugar 128, urea 25.4, and cholesterol 171.

He was put on pancreatic rest regime and improved. The serum amylase was normal in 72 hours and the Levin tube was removed in 72 hours. On Feb. 16, five days after admission, oral cholecystogram showed nonfunctioning gallbladder. Because of his age and general debility he was sent home on a fat-free diet Feb. 19, 1957.

He was readmitted two and one-half years later in Aug. 1959, with a similar episode. The serum amylase on admission was 1,183. He was placed on the pancreatic rest regime and in 72 hours his serum amylase was normal and the Levin tube removed. He went home in five days. He died of cerebral vascular accident during the summer of 1960.

CASE REPORT 6

Mrs. F. R. R., a 20-year-old white female, was admitted to the Baptist Hospital on Aug. 17, 1957, at 8:10 a.m. with a history of severe upper abdominal pain present for 24 hours. For the past several days she had had some epigastric pain, nausea, and indigestion. She had been seen on two other occasions in the preceding few months with upper abdominal discomfort and indigestion and upper gastrointestinal series had been done on two occasions with normal findings. These episodes were controlled with antispasmodics and anti-cholinergic drugs.

During the year prior to this admission, this patient had had surgery on three occasions. Two of the operations involved closure of a cecal fistula done in two stages. This fistula had followed an appendectomy. The other surgery was dilatation and curettage for abnormal uterine bleeding. She was married a few months before this admission.

On physical examination this was an acutely ill young white female, tossing about in bed with severe epigastric pain with a temperature of 97.8, pulse 100, respiration of 12, and blood pressure of 112/80. On examination of her abdomen she had a low right rectus and long right paramedian operative scars. She had marked epigastric tenderness but no other tenderness. No masses or viscera were palpable.

The laboratory showed hemoglobin 12.5 gm., red blood count 4,150,000, white blood count 8,300, and 86 polymorphonuclear leukocytes. Urinalysis was normal and the serum amylase was 574. She was started on pancreatic rest regime and improved to the extent that in 72 hours her serum amylase was normal and the Levin tube was removed on Aug. 19, 1960. The blood calcium on Aug. 20 was 6.3. She was given calcium gluconate in the vein. The day after the tube was removed, she became sick again with severe epigastric pain, vomiting, and apparent jaundice. Her temperature was 102, pulse 140. An anesthesiologist saw her and did an epidural block. She improved so far as pain was concerned, but the temperature of 102 and pulse 140 continued.

After 48 hours of the epidural block being in effect, consultation was held on the advisability of giving ACTH. She was given 500 cc. of blood on Aug. 22, 1960. It looked as though she would die. She was receiving calcium gluconate intravenously to combat tetany. On Aug. 23 her bilirubin was 4, icteric index was 29.8, and serum amylase was 88. In the afternoon she was started on ACTH, 50 units intravenously, and Achthar Gel, 80 units in the muscle, every 12 hours. At the same time antibiotic doses were doubled.

There was marked improvement in a few hours. Her temperature was normal, pulse 76, and there was a decrease of pain and tenderness. The next day the Achthar Gel was reduced to 40 units every 12 hours. The epidural block was discontinued on Aug. 26, four days after it was started. On Aug. 26, the Achthar Gel was reduced to 25 units every 12 hours, the Levin tube removed, parenteral fluids stopped, and the patient started on surgical liquids. By Aug. 30, Achthar Gel was reduced to 10 units twice a day and by Aug. 26 the bilirubin was 1.13.

On Aug. 31, an upper G.I. series was negative and an oral cholecystogram showed a nonfunctioning gallbladder even with double dose of dye. She was discharged on Sept. 1 on a fat-free diet and Achthar Gel, 10 units daily, to have definitive surgery in three weeks.

She was admitted to St. Dominic's Hospital on Sept. 20, 1957, at 10 a.m. with severe right upper quadrant pain of three days duration. She was on the operative schedule for elective biliary surgery Sept. 24, 1957. Examination revealed a 20-year-old white female acutely ill with much pain in the right upper abdomen with a temperature of 98.8, pulse 96, respiration of 20, and blood pressure of 122/100. Her abdomen revealed three right upper and lower rectus and paramedian operative scars of recent origin. Right upper quadrant tenderness was most marked over the gallbladder region and with some voluntary spasm.

Laboratory procedures showed hemoglobin 88 per cent, red blood count 4,440,000, white blood count 9,950 with 65 polymorphonuclear leukocytes. Urinalysis was negative and serum amylase was 30 units.

On Sept. 21 pain increased and she had a chill and temperature elevation of 102.6 with pulse of 140 and right upper quadrant tenderness was more marked. There was rebound tenderness and referred tenderness. On Sept. 21 the serum amylase was 50 units, bilirubin was .0, direct, indirect 1.3, white blood count 11,100, and 79 polymorphonuclear leukocytes. She was given 200 mg. cortisone in a drip and was operated upon a few hours later.

At surgery the gallbladder was enlarged and acutely inflamed, was markedly distended, and was filled with suppurative material and one small stone. Its walls were markedly thickened and it was adherent to the duodenum and omentum. The liver and pancreas were normal. The gallbladder was removed from the fundus down.

Postoperatively she was given cortisone, 150 mg. intravenously, the day after surgery and then 100 mg. intravenously the day after that and then no more. She did quite well. An intravenous cholangiogram was done on the ninth postoperative day and showed the ducts quite well without calculi. She went home on the 11th postoperative day and has been well since.

CASE REPORT 7

Mr. W. L., a 75-year-old white male, of the GM&O railroad, retired, was admitted to St. Dominic's Hospital on May 20, 1957, at 10:15 p.m. with a history of sudden onset of severe epigastric pain, nausea, and vomiting at 3 a.m. on that date. He was seen at home three times on that date by his local medical doctor and given sedation. His temperature was up to 102 that afternoon while at home. He had had a similar, but less severe, illness 13 months prior to that time attributed to a mycin drug.

X-rays of his stomach, gallbladder, and an electrocardiogram were done in the hospital as an outpatient four weeks previously and were normal. On examination he was an acutely ill, moderately obese, elderly white male, with temperature 100.6, pulse 80, and respiration 20, with blood pressure of 138/78. Examination of his abdomen showed moderate epigastric tenderness and moderate to marked right upper quadrant tenderness with muscle spasm. There were no palpable masses or viscera.

The laboratory procedures showed hemoglobin 15.2 gm., red blood count 5,200,000, white blood count 12,000. Urinalysis was albumin 2 plus and sugar 2 plus with a negative microscopic. Serum amylase was 816, icteric index 18, creatinine 1.1, cholesterol 240, glucose 173.

On May 21 he was worse, even though on the pancreatic rest regime. The serum amylase came on down but his temperature and his pulse went up. He became icteric and tenderness and right upper quadrant muscle spasm increased. He was seen in consultation on May 21, 1957, by an internist and by a surgeon. The surgeon recommended cortisone and the internist on May 22 recommended surgery, with biliary decompression as being mandatory.

He was operated on May 22, 50 hours after admission, under right intercostal nerve block anesthesia. At surgery, through a right subcostal incision, the gallbladder was seen to be markedly distended and acutely inflamed and contained seroprulent material and several small calculi. There was thin, reddish, brownish, black fluid free in the peritoneal cavity. The pancreas was swollen and indurated. The liver was swollen, smooth, firm, and engorged. The gallbladder was aspirated through a trocar and a No. 20 Malecodt catheter was placed in the gallbladder with purse strings sutures and the abdomen was closed.

He did well for the first few days postoperatively and then his urea nitrogen went up, he had daily temperature elevation, some ileus, and no appetite. However, with parenteral fluids, vitamins, and blood,

he improved. One week postoperatively he was started on cortisone and was kept on it in diminishing doses until his discharge 35 days after surgery on June 26, 1957.

He was readmitted on Sept. 2, 1957, and the next day cholecystectomy and exploration of the common duct was done. An operative cholangiogram showed a normal duct system without stones. A Cattell long armed T tube was placed via common duct into the duodenum. The pancreas was somewhat hard, and he was given cortisone immediately prior to and following surgery. He did quite well and went home in the 11th day and was readmitted eight days later with acute cholangitis. The T tube was removed and he responded well to antibiotics and went home in four days. He has remained well since.

SUMMARY

1. Acute pancreatitis has been discussed under the headings of history, etiology, pathophysiology, clinical features, and treatment.

2. Seven cases have been presented. Five received definitive surgery after subsidence of an acute episode or episodes. These five are well three to eight and one half years after surgery. One patient died of acute hemorrhagic pancreatic necrosis. The seventh patient died at age 80, two and one half years after the last acute pancreatitis episode. ★★★

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THERAPEUTIC CHIROGRAPHY

Personnel experts estimate that illegible handwriting costs business at least $70 million a year, and a few organizations have sponsored courses so that adults can learn to write legibly. An expert in educational psychology, Dr. Luella Cole, calls handwriting "one of the most neglected, worst taught and least understood of all school subjects." Emphasis on typewriter use worsens this situation. As a result, 23 million pieces of mail ended up in dead letter offices last year, and insiders in any company can tell stories about the unfortunate results of illegible, handwritten memos and comments on memos. Particularly troubled are hospitals: One major hospital reports that in a seven-month period, 178 medication incidents were largely due to illegible handwriting. At another hospital, Mount Sinai Hospital in New York, the Handwriting Foundation helped establish an instruction booth and penmanship course after illegible prescriptions had become so numerous that an extra telephone had to be installed in the drug dispensary for pharmacists to call doctors for translations.

—*The Insider's Newsletter*

A Study of Nose and Throat Carriers Of Staphylococci in a General Community

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A survey of the general population of Jackson, Mississippi was made to determine if coagulase positive staphylococci were as prevalent in the general population as it is in the hospital population.

It was found that in 22 per cent of 547 families studied all members (average of 3 members per family) were carriers, and in 84 per cent of the families at least one member was a carrier. The phage 80/81 strain was found in 9 per cent of the families.

Of 1,640 individuals studied, 40 per cent harbored a coagulase positive strain of staphylococci with 11 of these being resistant to penicillin. Phage type 80/81 was found in 4 per cent of these individuals as compared to 17 per cent in the hospital personnel.

THE RECENT LITERATURE CONTAINS numerous reports concerning the problem of antibiotic resistant staphylococci in hospital patients, personnel, and environment;[1, 2, 3, 4] however, there is actually little known about the staphylococcal state within the general population.

Rountree[5] reported finding coagulase positive staphylococci in the nose of 19.1 per cent of 120 Wabaga natives from the Western Highlands of New Guinea. All of the strains were sensitive to the antibiotics tested. Gould and McKillop[6] found that 24 per cent of 503 strains of staphylococci isolated from preclinical medical students over a period of four years were resistant to penicillin and also that 14 per cent of 183 strains isolated from hospital-unattached persons were resistant to penicillin.

The purpose of this study was to determine the state of the staphylococci within the general population and to relate the results to those obtained from hospital studies. The city of Jackson, Miss. (population 130,000), was chosen as the test community, and the particular areas studied were mapped by the Statistical Department of the State Public Health Service, which took into consideration the races and economic groups of the community.

METHODS

In the areas designated, teams composed of a doctor and a technician or an advanced student and a technician entered the homes of the test population in the early evening. Nose and throat swabs were taken from the members of each family that were available at this time. The swabs were then brought into the laboratory and placed into trypticase soy broth containing 7.5 per cent sodium chloride and incubated at 37° C. for approximately 36 hours. The cultures were stored in the refrigerator until further studies could be made. All the cultures for the entire survey were collected within a five-day period.

Subcultures were made from the refrigerated cultures to trypticase soy agar plates, and a sweep of several representative colonies was picked for further studies.

Phage typing was carried out, using the method of Blair and Carr[7] with the phage being applied with a multiple-typing apparatus that was designed in this laboratory. Antibiotic sensitivity determinations were made using low concentration paper discs. These studies were carried out on coagulase positive strains only.

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RESULTS

Incidence Among Community Families

Nose and throat cultures were taken from an average of three individuals from a total of 547 families. The results from this study are shown in Table I. The data show that all members of

TABLE I

INCIDENCE OF COAGULASE POSITIVE STAPHYLOCOCCI IN NOSES AND THROATS OF SAMPLE POPULATION OF COMMUNITY

Total number families studied—547
Av. of 3 individuals per family

Distribution	*No. Families*	*Per Cent Carriers*
All members	123	22
One or more	458	84
One or more 80/81*	48	9

* Strains of staphylococci lysed by phage 52/80, 52/52A/79/80, 52/52A/79/80/81 or 80/81.

22 per cent of the families carried a coagulase positive strain of staphylococci, whereas 84 per cent of the families had at least one member who was a carrier. The common "hospital strain" phage type 80/81 was found in 9 per cent of the families.

Table II shows a comparison of the incidence of coagulase positive staphylococci in white and colored families in the community. There was no significant difference in the carrier state between the two races.

A study was made to determine if a relationship existed between the economic state within the community and the staphylococcal carrier state. The results are shown in Table III. The data show that from 83 to 98 per cent of the general population carried staphylococci, of which less than 50 per cent carried a coagulase positive strain. Resistance to penicillin varied from 6 to 18 per cent between the economic groups, with resistance to the other antibiotics tested being found to a lesser extent.

Incidence Among Individuals

Table IV shows the incidence of staphylococci found in the nose versus the throat of 1,640 individuals within the general population. It is interesting to note that in both the nose and the throat, staphylococci were found in a very high percentage of the population.

TABLE II

COMPARISON OF INCIDENCE OF COAGULASE POSITIVE STAPHYLOCOCCI IN WHITE AND COLORED FAMILIES IN COMMUNITY

	White		*Colored*	
DISTRIBUTION	NO.	PER CENT CARRIERS	NO.	PER CENT CARRIERS
Families Studies	328	—	219	—
All Members	82	25	41	18
One or More	277	84	181	82
One or More 80/81	23	10	15	7

Since the nose is commonly considered the normal habitat of the staphylococci, it was surprising to find that the throat yielded staphylococci almost as often as the nose, and that there was

TABLE III

RELATIONSHIP BETWEEN ECONOMIC STANDARD AND STAPHYLOCOCCAL CARRIER STATE

Race	*Economic Standard*	*No. Cultured*	*Per Cent Cont. Staph.*	*Per Cent Coag. Pos.*	*Per Cent of Strains Resistant to* P	Te	C	E
White	Lower	126	83	38	10	5	2	0
White	Mid-Mid	515	97	44	11	5	3	4
White	Mid-Upper	199	97	45	18	5	4	1
White	Upper	122	98	39	13	4	3	6
Colored	Lower	321	84	28	8	2	2	0.6
Colored	Middle	157	98	45	11	4	4	7
Colored	Upper	191	95	32	6	1	1	0

P—penicillin Te—tetracycline C—Chloromycetin E—erythromycin

a slightly higher incidence of coagulase positive staphylococci found in the throat than in the nose.

Comparison of Staphylococci

In Table V is shown a comparison of hospital personnel and community population that harbor coagulase positive staphylococci. There is a much higher incidence of coagulase positive cultures among the hospital personnel than among the community population: 53 and 40 per cent respectively. Of the total strains, the percentage of antibiotic resistant strains is much higher in the strains isolated from hospital personnel than from the general population. For example, penicillin resistance was found in 29 per cent of the total personnel and in only 11 per cent of community population. Four per cent of the general population harbored the 80/81 strain, while 17 per cent of the hospital personnel harbored this strain.

TABLE IV

COMPARISON OF THE INCIDENCE OF STAPHYLOCOCCI FOUND IN THE NOSE VERSUS THE THROAT IN INDIVIDUALS WITHIN THE GENERAL POPULATION

	Total Individuals	*% Harboring Staphylococci*	*% Harboring Coag. Pos. Staph*
Nose	1640	93.5	39
Throat		92.4	41

DISCUSSION

The finding of a coagulase positive strain of staphylococci in all members of 22 per cent and in at least one member of 84 per cent of the families indicates that coagulase positive staphylococci are prevalent within the community. Even though the percentage of coagulase positive cultures from the total community population was much less than those found in hospital personnel, 40 per cent of the community population harbored a coagulase positive strain of staphylococci, as compared to 53 per cent of the hospital personnel. The percentage of coagulase positive cultures isolated from the community in this study is in close agreement with the results of others using a smaller group.[8]

A very high incidence of staphylococci was found in both the nose and the throat of the individuals within the general population. The high incidence of staphylococci found in the throat was especially surprising, but the method of growing the culture may explain this. In this method, the 7.5 per cent sodium chloride selectively inhibits the other normal flora of the throat, thus allowing the staphylococci to grow. If routine culturing media had been used, many of these cultures would not have been positive for staphylococci as the other flora would mask the staphylococci, preventing sufficient growth to be seen on the plate. This has been shown to be true in experiments performed in this laboratory, which are to be published.

A strain of staphylococci was found in 93 per cent of the community population, but only 40 per cent of these people harbored a strain that was coagulase positive. As expected, the incidence of resistant staphylococci among people who are not associated with hospitals was much less than among hospital patients and personnel. As is true with hospital cultures, penicillin is the antibiotic to which the highest percentage of strains have become resistant within the community. The higher instance of resistance of penicillin as compared to the other antibiotics tested would indicate that the general population has been exposed to more penicillin than other antibiotics.

TABLE V

COMPARISON OF HOSPITAL PERSONNEL AND COMMUNITY POPULATION HARBORING COAGULASE POSITIVE STAPHYLOCOCCI

	No. Persons Cultured	*Per Cent Coag. Pos.*	*Per Cent of Cultures Resistant to Antibiotics:* PENICILLIN	TETRACYCLINE	CHLOROMYCETIN	ERYTHROMYCIN
Community	1640	40*	11	4	3	3
Hospital Personnel	150	53**	29	18	—	—

* 4 per cent harbored strain 80/81

** 17 per cent harbored strain 80/81

The strain 80/81 was found in 4 per cent of the community population as compared to 17 per cent of the hospital personnel. Since no questionnaire was used in this survey, there is no way to speculate as to the source of the 80/81 strains found in the general population. It is conceivable that these strains were picked up during contact

with the hospital environment or by association with ex-hospitalized patients. The data do show that the general population is not a great reservoir of this particular strain of staphylococci.

No significant difference in the staphylococcal carrier state or resistance to antibiotics could be detected between the races or the various economic groups within the races, indicating that these factors do not play a role in the determination of the carrier state.

SUMMARY

1. A total of 547 families were studied, of which all members were carriers in 22 per cent; and at least one member was a carrier in 84 per cent. Phage type 80/81 was found in 9 per cent of the families studied.

2. Forty per cent of the community population harbored a coagulase positive strain and 11 per cent were resistant to penicillin. Phage type 80/81 was found in 4 per cent of the community population and 17 per cent of hospital personnel.

3. There was no significant variation in the staphylococcal carrier status associated with race or economic standard. ★★★

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LOSING HAIR? DON'T DESPAIR!

Hair coming out? Don't give up—it may come back, according to Dr. Albert M. Kligman, a Philadelphia physician. Hair loss can be psychosomatic and temporary, says Dr. Kligman. His conclusions, published in the *Archives of Dermatology,* are based on studies of patients for whose hair loss no physiological cause could be found. Most dramatic case he ran across involved a man who began to lose his hair 10 weeks after he was convicted of first-degree murder. He became bald, was pardoned, and had all his hair back by the time he was released.

Case Report V of Maternal Mortality Study: Amniotic Fluid Embolism

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THE FOLLOWING CASE REPORT, presented by the Committee on Maternal and Child Care, represents death from amniotic fluid embolism.

The patient in Case Report V was admitted to the hospital approximately three weeks beyond the expected date of confinement. Four and one-half hours after she was admitted to the hospital she had a sudden severe convulsive seizure, turned blue, and respirations ceased. A stillborn female infant was delivered by emergency cesarean section. The findings of the Committee on Maternal and Child Care are discussed in this report.

CASE NO. 186-11130-60

A.L.R., a 34-year-old Negro female, para 2-0-0-2, was admitted to the hospital in early labor at 1:05 p.m. According to her menstrual history, she was approximately three weeks beyond her expected date of confinement. Her previous and present pregnancies had been uncomplicated. She had been completely examined in the early part of pregnancy and had been seen regularly for a total of 20 antepartal visits.

Her serology was negative, she was Rh negative, and her hemoglobin was 14 grams per cent. She had received no special treatment during pregnancy. On admission, her membranes were leaking and contractions were occurring every 15 minutes. General physical examination was negative. The fetus was in a vertex presentation with good fetal heart tones. Her blood pressure was 120/80.

The patient was seen frequently during the next four hours. Pelvic examinations revealed the cervix to be 2 cm. dilated and 50 per cent effaced on admission, and at 5:15 p.m. it was 3 cm. dilated and still 50 per cent effaced: at that time the station of the head was –1. She was quite apprehensive and received Demerol 75 mg. and Phenergan 50 mg. at 2:40 p.m. and Demerol 50 mg. and Phenergan 50 mg. at 5:30 p.m.

No abnormalities were noted during the first 4½ hours of observation. At 5:40 p.m. the patient had a sudden severe convulsive seizure. She turned blue and respirations ceased. At 5:43 her blood pressure was 60/0. It then disappeared. She was given oxygen by positive pressure and intravenous fluids were started. The patient was rushed to the delivery room and an emergency cesarean section was performed. A stillborn female infant was obtained. All attempts at resuscitating the mother were to no avail. An autopsy was performed and on gross and microscopic examination there was clear evidence of a large amount of amniotic fluid in the pulmonary arteries and their branches.

CASE REVIEW

This case was reviewed by the Committee on Maternal and Child Care at its regular quarterly meeting and the following evaluations made:

I. Adequacy of Data. The data obtained in this case were rated 5 on a scale of 1 (minimal) to 5 (completed data sheet, relevant explanatory note, and autopsy report).

II. Cause of Death. As confirmed by autopsy, this case was considered to be a direct obstetrical death due to amniotic fluid embolism.

III. In ascertaining avoidability, the committee, following the AMA Guide for Maternal Death Studies, assumes (1) that the physician possessed all the knowledge currently available and relevant

Chairman, Committee on Maternal and Child Care of the Council on Medical Therapy, Mississippi State Medical Association.

to the factors involved in the death, (2) that he had a high level of technical ability by experience, and (3) that he had available to him all the facilities present in a well-organized and properly equipped hospital.

Amniotic fluid embolism is a sudden catastrophe, for which there is no known cause. The committee therefore considered this death to be unavoidable.

IV. Factors of Avoidability. None were considered to be present.

DISCUSSION

The committee felt very appreciative of the way in which the data had been reported by the attending physician in this case. Not only had he filled out the data sheet completely, but had also added a full explanation of the circumstances surrounding the death. Even without an autopsy, it would have been possible to make the diagnosis with reasonable certainty. However, an autopsy was done and the presence of amniotic fluid in the pulmonary arteries confirmed pathologically. The dramatic nature of this case perhaps more strongly indicated an autopsy than some other maternal deaths. However, the committee feels that much more valuable data would be obtained in maternal deaths, if all physicians attending such cases realized the importance of obtaining an autopsy.

Amniotic fluid embolism is rare. Barno and Freeman[1] found 15 cases among 370 maternal deaths during seven years of a maternal mortality study in Minnesota. This gave an incidence of one per 37,323 live births. Among these 15 cases, exceptionally strong uterine contractions were noted in 14. In the present case, no mention was made of a change in the apparently rather ineffective uterine contractions which the patient had been having up until the moment of embolism. In seven of the Minnesota cases oxytocin had been used during labor, suggesting that this may have had something to do with the embolism. No oxytocin had been used in the present case. The membranes had been ruptured in 14 of the 15 cases. In view of the actual rarity of the condition, it is important that the diagnosis not be used for otherwise unexplained maternal deaths without clear pathological evidence.

Incoagulability of the blood may be a serious complication of amniotic fluid embolism. It occurred in four of 15 cases in the Minnesota series. If the patient survives the initial episode, as was not the case here, a clot observation test is essential. Fibrinogen is frequently needed urgently, and this condition is one of the reasons why fibrinogen should be readily available to any institution in which obstetrical deliveries occur.

There is no known method of treating amniotic fluid embolism. Supportive measures such as positive pressure oxygen, intravenous fluids, and vasopressors are all that can be offered. If the first episode is not fatal, this treatment plus the management of the blood hypocoagulability may be sufficient. It should be remembered that the diagnosis of a nonfatal case is difficult to substantiate since the presence of amniotic fluid debris in the pulmonary vessels cannot be demonstrated. That such cases do occur, however, is indicated by the fact that the committee has recently considered a maternal death in which the classical clinical picture of amniotic fluid embolism occurred. The patient survived this episode but died a number of days later from other causes.

When it was evident that the mother was dead, a cesarean section was done as promptly as possible. Unfortunately, the child was stillborn. It seems clear[2] that when a mother dies in the last few weeks of pregnancy or during labor and the child within the uterus is viable and alive shortly before the mother's death, the physician has a responsibility to perform a postmortem cesarean section. At this point, the child has, theoretically, an independent existence and the indications are to save its life.

This means that, where possible, if a woman suffers from an intercurrent ailment in the last trimester of pregnancy, such as an automobile accident, cerebral hemorrhage or other major catastrophe, the equipment with which she is nursed should include the basic instruments for performing a cesarean section. When the mother is pronounced dead and if the child has recently been thought to be alive, the cesarean section should be performed as soon after death as possible. The problem which often arises is to decide the exact moment of death, since no time must be lost if the baby is to survive. This can only be determined on an individual basis.

SUMMARY

1. A completely documented maternal death due to amniotic fluid embolism is reported.

2. Problems connected with this disease and with postmortem cesarean sections are discussed.

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Prevention: Our Common Purpose

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The thesis of this paper—given as a memorial to Dr. Felix J. Underwood before the 1960 Mississippi Public Health Association meeting—is: prevention is a common bond binding the public health man and the private practitioner. The author describes Dr. Underwood as a "public health giant" and cites a need for more like him "who believe deeply in prevention and fight vigorously all their lives to make the preventive approach real and effective." He discusses the reason few medical students specialize in public health and suggests means of attracting young doctors. In conclusion, he writes, "Constantly we must have in mind the biological fact that the diseases with which we deal have a natural history that make no distinction between the public health man and the private practitioner . . . both have the same basic purpose of altering the course of disease in ways favorable to man . . . this common purpose must help us work together as servants of the people."

THE SOUTH HAS PRODUCED more than its share of the nation's leaders in public health. Felix Underwood was notable among these public health giants. His soundness and dependability were combined in a rare way with vision to plan wisely for the future and with the strength and enthusiasm needed to realize his plans. He might have taken major credit for the remarkable progress in public health in Mississippi during his lifetime had he been a less modest man. Elected by his fellow-workers in 1942 as president of the American Public Health Association, he later received a Lasker Award in 1953. A quotation from the Lasker citation[1] summarizes well his contribution.

> For more than three decades Felix Underwood has demonstrated how a state health official can soundly build an expanding health service for the people of the state. Under his aegis, Mississippi has extended the concept of public health from the control of epidemics to a modern concept embracing the promotion of health as well as the prevention of disease.
>
> . . . in such work lies the essence of sound public health administration to which this association is dedicated.

Right up to the time of his death, he worked in his own inimitable, quiet, but sure, way, building and strengthening the edifice to which he had devoted so much of his life. Only when he had gone and was no longer able to do what he alone could do so skillfully, did we appreciate fully how fortunate we had been to have him with us over the years. It has been said, "Great men hallow a whole people, and lift up all who live in their time."[2] Certainly, all who knew Felix Underwood were lifted up by his spirit.

This discussion stresses three major points. First, our health problems are sure to become more complex in the future than they are now. Secondly, as part of the increasing complexity of life in general there inevitably will be a greater complexity of health organization. As a third point, the general welfare demands that public health workers and the individual practitioner of medicine cooperate more closely for the common good than they have sometimes done in recent years. In concluding, I shall make some suggestions for promoting a more unified approach to the end that prevention may become our common purpose.

The increasing complexity of our health problems requires little documentation. Rene Dubos[3] states the problem clearly in relationship to infectious disease, pointing out the need for modifi-

Felix J. Underwood Memorial Lecture.

From the Department of Public Health Practice, Harvard School of Public Health.

Read before the 24th Annual Meeting, Mississippi Public Health Association, Jackson, December 8, 1960.

cation of the germ theory as it was first advanced. Dubos says,

> In its original form, the germ theory of disease was formulated to deal with the acute and epidemic infections which dominated the 19th century pathology. . . . Most frequently today, problems arise not from the highly virulent pathogens, but rather from the common microbes that are ubiquitous in our environment, . . . that become agents of disease only when the general resistance of the body has been decreased by disturbances of individual physiology or in social conditions. . . .
>
> I find it difficult to believe that the solution to the problem of infectious disease can be based only on an endless search for new types of vaccination, or new types of drugs, to meet each emergency as it arises. We must look for other avenues of approach, probably different ones from those based on the concepts of specific etiology. . . .
>
> The crying need at present is to acquire more understanding of all the multifarious effects that the environment exerts on living things, and of the adaptive mechanisms which allow man to function under a wide range of conditions. . . .

MORE UNDERSTANDING

In short, Dubos seems to be telling us that we must begin to pay more attention to man and to his environment. Genetics, nutrition, social organization, and mental health, as well as pollution of air and water, ionizing radiation, and industrial poisons must be our concern. It is hardly necessary to add that we must become more and more aware that the so-called degenerative diseases are now our major enemies as we live out our lives in our man-made environment.

To come to my second point, every aspect of life is more complex, as we move from what Elton Mayo[4] called an established society to our present adaptive society. Industrialization, urbanization, geographical and social mobility have pulled up our roots. Big business has produced what William H. Whyte[5] calls "The Organization Man," cajoled and even forced into conformity with his fellows in suburbia. Even the small farmer finds it uneconomical to compete with the mechanization that only large farms can support.

Lewis Mumford wrote charmingly some years ago of the "Culture of Cities." Now he makes a strong plea for a better balance between our present concentration on modern technology and our relative lack of attention to human values. Mumford[6] points out that:

> . . . the final goal of the power civilization that has escaped from the ecological pattern of nature, with its constant give and take between a multitude of cooperating organisms—restrained, limited, and balanced by this very partnership—is annihilation and self-destruction. . . .
>
> To our present tendency to level down the environment and all our organic capacities to the point at which the machine functions most rapidly and most efficiently . . . (we must) oppose a new technology, one so finely adjusted, so delicately responsive, that it will meet all the needs and occasions of life at a minimum cost of human values. The organs of such a technology, . . . were already in existence in the middle of the 20th Century, but the seeds that were sprouting in agriculture, medicine, psychology, and town planning, were choked by the weeds of the power mythology. The priests of this strange religion go about their dehumanizing tasks with the same inflexible dedication that the Aztec priests applied to disemboweling and slaying en masse their living victims. They are prepared to sacrifice the human race itself rather than to reestablish control over the advances of technology.

Amid the general complexity of life, the ever increasing complexity of our health services is clearly visible. When pioneers like Felix Underwood first came on the scene, public health was a simple life and death matter. If certain precautions were not taken, a proportion of the people could be expected to die and to do it with reasonable dispatch. The cost of a short illness usually did not exceed the cost of the funeral. Death might come in the first year of life or later on from diphtheria, typhoid, malaria, or pneumonia. To many with tuberculosis, death would be delayed a little longer. However, there was relatively little of the long-term, expensive illness that is our increasing problem today.

MULTIPLICITY OF AGENCIES

As our health services are organized at present, we tend to separate "prevention" and "cure" and have many complicated ways of paying for services received. Health workers from other countries, who come to see the services as they are organized in the United States, are astonished by the multiplicity of agencies, both voluntary and governmental. They wonder also how the patient threads his way among the many types of specialists. The diverse mechanisms for payment as they apply to different categories of patients in different socioeconomic groups are not easy to understand either. Only in exceptional circumstances is the comprehensive and continuing type of health service necessary for high quality medical care found without undue financial barriers.

The third point is concerned with the two major groups of physicians who provide health services in the United States, those in private practice

and those doing public health work. The important point which distinguishes these two groups is that the public health man works in an organized way in the community largely with groups of people. The private practitioner works with the individual in his family situation and is little concerned with organization.

COMMUNITY PHYSICIAN

Being physician to the community, as the health commissioner must be, is in many respects a different kind of job from that of the physician in private practice. It is better to recognize and try to understand these differences than to gloss over them as unimportant. This question will be discussed later. The basic unity underlying both types of work is so great that differences seem minor when viewed in proper perspective. Nature challenges both groups of physicians to deal with the natural histories of the various diseases, disorders, and disabilities that they encounter. Both groups share a common background in their basic medical education and in their hospital experience. Both share the long and honorable traditions of the practice and the art of medicine as one of the greatest humanitarian services.

The natural history[7] of the health problems with which all physicians must deal deserves discussion at this point. Let us be quite clear about what the term "natural history" means. The epidemiologist speaks of the natural history of a disease, and he spends much effort in elucidating the details. He is concerned with human host, the disease producing agent, and the environment in which host and agent meet. He defines the circumstances of the interaction of host, agent, and environment one upon the other as this interaction occurs among groups of people. This interaction is highly dynamic and progresses in time. It is subject to many influences including such barriers as the physician (whether he be in public health or private practice) may be able to erect to stop or delay the onward progress of the natural history. In the absence of such preventive action, Nature moves its forces relentlessly forward.

A COMMON ENEMY

In a group of significant size, study of the natural history enables us to predict for a given disease what proportion of those exposed will be recognizably affected, what proportion of those affected will die, be disabled, or be cured. This is the challenge which Nature throws down to us, whether our patient be the individual or the community. This is our common enemy.

It is our need to combine all available strength against this enemy that gives common cause to both the public health man and the individual practitioner. Some of the barriers needed to keep natural history from progressing will be of the type that the individual practitioner can manage very well alone, or aided by those who customarily work under his direction in the hospital or the laboratory. Other barriers may be erected only by some kind of community action, i.e., public health. Obviously, we fight as if blindfolded and with low efficiency if there is lack in communication, understanding, and joint planning between the two groups of physicians.

In his address as president of the American Public Health Association, Felix Underwood[8] said, "All along, we need a program of participation of physicians aiding the public health program and a health department helping the physicians—both serving the health needs of the individual."

THE MEANING OF PREVENTION

No one campaigns vigorously against preventive medicine. Everyone is for virtue and sin has no protaganists—at least not in the open. It is not passive approval of preventive medicine or endorsement in principle that is needed. The times demand more than this. What we need are more men like Felix Underwood, who believe deeply in prevention, and fight vigorously all their lives to make the preventive approach real and effective.

The term "prevention" is employed here as it was used at the time the King James version of the Bible was written. Then prevention meant "to come before" or "to anticipate." When the psalmist said, "I will prevent the dawning of the morning," he did not imply that it was his intent to keep the sun from rising. What he planned to do was to be on the job before sun-up. In this sense, preventive medicine is that kind of medicine which understands the natural history of disease and which works through primary prevention to promote health and provide specific protection where that is possible. This approach is also concerned with secondary prevention or prevention of progression, through early diagnosis and prompt treatment, through limitation of disability, and through rehabilitation.

Let us return briefly to consider certain characteristics of the two types of physicians which are pertinent to this discussion. The public health physician, as pointed out by Levine and Wellen[9] plays several roles in his work, and a number of

groups help to determine his thinking and his action. In his role as a physician, he refers to the medical profession; as a public official, he is concerned with other public health physicians, health workers other than physicians, and with many governmental officials. As a community health leader, and in the role of health administrator, he must deal with not only his own agency but with other agencies in government, with voluntary agencies that have health interests, and with many organizations outside the community such as the state health department.

THE PRIVATE PRACTITIONER

Wilson[10] points out the role of the physician in private practice as that of an entrepreneur freed from the imperatives of doing his job as part of an organization. He says:

> In France, Great Britain, the United States of America, and Germany, the doctor of a hundred years ago exercised his profession largely unhampered by regulations; all that was demanded of him was a degree. He established himself at his own expense when and how he wished, received any patient who applied to him, and discussed his fees with the patient. Nobody intervened in this purely private relationship. It was usually even protected by the law, which guaranteed professional secrecy, that is, the doctor's duty to disclose nothing of what he had learnt while treating his patient.

The doctor had in the hospital a "workshop contrived for his convenience and a host of subservient auxiliary personnel." He was "not only the central figure, but a towering one" . . . "he gave the orders to nurses, administrators, or whomever, and in his absence the organization ran in deference to precedents he had established or anticipations of those he would establish."

This former role of the physician in private practice is changing for a number of reasons, including the specialization of medicine and the increasing complexity of the hospital itself. The entrance of the trained hospital administrator striving for professional status is an additional factor. Wilson predicts that in the future the doctor will be more of a team member than has been the case in the past, working with other medical specialists, with nonphysician health workers, with third party payment agencies, with education agencies, and even with the patients who understand their health problems more completely than has been the case in the past.

We have pointed out a number of differences between the work of the private physician and that of the doctor in public health. Even though both careers have the same biological objective, they are not equally attractive to the common source of supply in the medical school. One does not have to look far to determine that public health has only a few men like Felix Underwood. There is a shortage not only in quality but in quantity as well. In an effort to determine the causes and to suggest methods of recruitment, one of our graduate students at Harvard[11] has recently completed a careful study of 430 third year medical students in New England. He was interested not only in how students feel about public health but also what place it has in their career planning.

The results of this study are brutally clear—not a single student gave public health as his first choice. Close examination of what lies behind this serious situation was obviously in order. First, it was important to learn what picture the students have of public health. They regard public health as being easy to master with little intellectual challenge and having little concern with personal relations with people. It is considered lower prestige-wise and less financially rewarding than other medical specialty careers. The public health physician is pictured as self-indulgent and unambitious, relatively mobile, with light demands on his time, with limited independence of action, and largely occupied with administrative problems. More on the optimistic side, the students felt that the public health physician is service oriented and that public health is a specialty with humanitarian value.

RESULTS OF STUDY

> Accuracy of students' perceptions of a specialty career was estimated by comparing their perception of its various features with the perceptions of the corresponding specialist group. Public health was found to be less accurately perceived than other specialties tested (internal medicine, pediatrics, and neurosurgery). It was noted that public health physicians especially perceived of their field as being more difficult to master, having more intellectual challenges, and involving more concern with personal relationships with people than did the students . . . the public health physician group showed high unanimity of response regarding the characteristics of their field . . . they had clearer self-perceptions . . . than did the three other specialty groups.

Personal values in relationship to a career in order of their descending importance to the students were found to be: intellectual stimulation, humanitarian service, personal contact with people, financial reward, and finally, social prestige.

Since this is the value system which the students hold, it is particularly unfortunate that they perceive public health as providing no intellectual challenge and little personal contact with people. The men already in public health testify that their specialty provides good opportunity to realize these values.

STUDENTS' MISCONCEPTIONS

Explanations as to how the students got their misconceptions of public health were sought in this study. It is quite evident that the medical schools are providing inadequate opportunities for students to discover what public health work is really like. The curriculum usually gives an incomplete and "unsatisfactory introduction to what this career entails, as compared with other medical specialties." Opportunities are needed for the students to see, to become familiar with, and to understand men like Felix Underwood. Such people can provide a model which will enable the student to see what the role of the public health physician of the highest type really is. Examples of this kind can undoubtedly be of the greatest importance in clarifying this serious misconception and in recruiting needed outstanding men to the public health field.

These findings are confirmed by Coker and his associates[12] who write:

> While students, faculty, and practicing physicians agree to the importance of public health, it is equally clear that very few consider it as a field in which they would like to work. . . . Out of 2,676 medical students, nine had the current intention of entering public health and five intended to enter preventive medicine. . . . Public health, like virtue, is highly esteemed, but very few wish to practice it. It is evident that many public health physicians have entered the field after having engaged in other types of practice.

NATIONWIDE SAMPLE

In a further study of 471 questionnaires sent to public health physicians and 214 to physicians practicing internal medicine as a nationwide random sample, some very interesting findings appear. The public health physician is appreciably older than the internist. The public health physician is more likely to be a woman, to have grown up in a smaller town, to have thought of entering general practice, and less likely to have come from a professional home, or to have thought of medicine as a career before entering high school. Two-thirds of the public health physicians had worked in other branches of medicine before entering public health.

The medical school experience does not seem to have attracted very many students to public health. This is quite different from the internists who report having been much influenced during their medical school career toward their future specialty.

We have discussed the increasing complexity of health problems and services in the United States and have looked at some differences between the physician in private practice and the specialist in public health, especially the differences that appear important to medical students planning their careers. We have examined the natural history of disease and disability as a unifying factor which may help the two groups of physicians to see their common biological purpose more clearly.

What is the significance of the points which have been considered? We shall undoubtedly have more and more complicated organized community health services. Whether they be governmental or under voluntary auspices is beside the point. These organized services will be more efficient if operated by men trained to deal with the problems of organization and with the community. It is this kind of training that the physician in public health is required to have to be certified as a specialist.

WHAT CAN BE DONE?

The evidence is clear that if we are to meet the future need for public health physicians, more must be done than we are doing now. Public health must be made more attractive to the physician. Salary levels must be more nearly commensurate with earnings in private practice. Equally important, the public health job must have the intellectual challenge which appeals to our best young men. Research has been an essential factor in making clinical medicine for individuals attractive to its practitioners. There is a trend toward doing more research in the practice of public health, and this must be stimulated vigorously. Tools now available from the social sciences and from operational research make possible many types of investigations of administrative problems which could scarcely have been considered only a few years ago.

Constantly we must have in mind the biological fact that the diseases with which we deal have a natural history that makes no distinction between the public health man and the private practitioner. These two forms of practice are not foreordained by nature but are simply administrative man-made arrangements which our society has

adopted. Both forms of practice have the same basic purpose of altering the course of the natural history of disease in ways favorable to man. This common purpose must keep us from pulling apart, and it must help us work together as servants of the people. Felix Underwood has given us an example we shall do well to follow. ★★★

55 Shattuck St.

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THE LOVELORN DIABETIC

A new treatment for diabetics was prescribed recently by Dr. John L. Doust, associate professor of psychiatry at the University of Toronto. Says Dr. Doust (a diabetic himself): "People with diabetes crave love and never seem to get enough of it." In studies conducted with diabetics undergoing mental therapy, Dr. Doust found that the disease is only partly caused by physical factors. Emotional attitudes and everyday stresses often caused or aggravated the physical factors involved in the disease. Most diabetics are oversensitive and tend to satisfy their emotional need by turning to food, he reports. As diet is very important in the control of diabetes, these emotional cravings which cause the diabetic to eat improperly should be satisfied by giving them more love and affection than healthy people require, advises Dr. Doust.

The Insider's Newsletter

Clinicopathological Conference XV

Conducted by the Department of Pathology
Mississippi Baptist Hospital
Jackson, Mississippi

On first admission to the hospital, the patient in CPC XV complained chiefly of pain in the lower abdomen and back. She had had renal calculi for some time and had had stones removed previously from each kidney. On the evening prior to admission, she had cramps in the lower abdomen and nausea. X-ray studies showed bilateral renal calculi with some evidence of narrowing at the uretero-pelvic junction on the left. Cholecystograms showed an almost nonfunctioning gallbladder. There was a crater in the pyloro-duodenal region with marked thickening of the folds in this region. Also in the duodenal bulb there was another crater surrounded by edematous folds. Discussers are Dr. C. E. Wallace, Dr. W. A. Smithson, and Dr. Kenneth M. Heard.

THIS 39-YEAR-OLD MARRIED white female was first admitted to the hospital on Aug. 1, 1960. She complained chiefly of pain in the lower abdomen and back. It was stated that she had known that she had renal calculi for some time. On the evening prior to the date of admission she complained of cramps in the lower abdomen and nausea. It was stated that she had also had some sulfonamides for urinary tract infection. At the time of admission she appeared to be emotionally upset. She had had stones removed from each kidney previously.

PHYSICAL EXAMINATION

She appeared as a well-developed, well-nourished white female who was not acutely ill. The head, neck, chest, and heart were all negative to examination. Scars in each flank were noted from previous surgical procedures. There were no abdominal masses or tenderness. The physical examination was otherwise basically negative. X-ray studies during the admission showed bilateral renal calculi (Fig. 1) with some evidence of narrowing at the uretero-pelvic junction on the left.

Cholecystograms showed an almost nonfunctioning gallbladder. The esophagus on upper gastrointestinal examination appeared normal at fluoroscopy. The stomach showed mild fasting residue. There was a crater demonstrated in the pyloro-duodenal region believed to be on the pyloric side. This crater measured about 1 cm. in diameter. There was marked thickening of the folds in this region. Also in the duodenal bulb there was seen another crater measuring 6 mm. in diameter surrounded by edematous folds. The duodenal loop and proximal jejunum were normal. The barium enema was unremarkable. Examination of the teeth showed no evidence of absorption of the lamina dura.

Laboratory work during her admission showed an admission urine having a specific gravity of 1.009. It was negative for albumin and sugar. There were 15-20 white blood cells per high power field and 0-1 red blood cells per high power field. Admission hematology showed a hemoglobin of 13.8 gm. with a hematocrit of 42 volume per cent. The sedimentation rate was 29 mm. The total white count was 8,800 with 77 per cent neutrophils and segmenters, 20 per cent lymphocytes, and 3 per cent monocytes. The platelets appeared adequate. Her admission VDRL was negative.

LABORATORY DATA

Blood chemistries done on Aug. 6, 1960, showed a bilirubin of 0.7 mg. per cent. The calcium was 12.9 mg. and the phosphorous was 2.3 mg. The blood glucose was 70 mg. per cent. Thy-

mol turbidity was 1.3 units. The total protein was 5.5 gm. with 3.3 gm. of albumin and 2.2 gm. of globulin. The urea nitrogen was 13 mg. per cent.

Repeat calcium and phosphorus on the following day were 12 mg. per cent and 1.8 mg. per



Figure 1. KUB film showing bilateral renal calculi.

cent respectively. An alkaline phosphatase was 8 units and the CO_2 combining power was 28 mEq. per liter. Sulkowitch on two consecutive days was reported as 3 plus. Creatinine was 1.2 and blood urea nitrogen 16 on Aug. 10. Further serum calcium and phosphorus studies were 12.1 and 1.6 on Aug. 12 and 11.1 and 2.4 on the Aug. 14. She was discharged from the hospital for further observation.

She was readmitted to the hospital on Dec. 18, 1960. She had done well on treatment until one week previously when ulcer pain, worse at night, back pain, nausea and vomiting developed. The admission urinalysis showed a specific gravity of 1.015 with a 3 plus sugar. The acetone was strongly positive. The chlorides were 625 mg. per cent (107 mEq. per liter), potassium 3.3 mEq., and sodium 140 mEq. The white count was 15,500 with 78 per cent neutrophils. Further blood chemistries on the following day showed a calcium of 12 with a phosphorus of 2.1. The blood sugar was 174, alkaline phosphatase was 8. A Sulkowitch test was reported as only 1 plus. The calcium on Dec. 22 was 11.2 and the phosphorus 2 mg. per cent. On Dec. 27, 1960, an operation was performed.

DISCUSSION

Dr. C. E. Wallace: "I'm not going to read the whole protocol but would like to point out some things that I think are important. This is a 39-year-old white female who was first admitted on Aug. 1, 1960 complaining of lower abdominal and back pain. On this admission it was stated that she had had renal stones previously. Physical examination did not reveal anything remarkable except old flank scars which I presume were for removal of renal stones.

X-RAY STUDIES

"The x-ray studies are very important. It is reported that she did have bilateral renal calculi with some evidence of narrowing of the ureteropelvic junction on the left side. Cholecystograms showed a nonfunctioning gallbladder which presumably indicated some gallbladder disease, possibly a calculus. The upper gastrointestinal series revealed two ulcer craters, one in the prepyloric area and one in the duodenal area (Fig. 2). The presence of the duodenal ulcer indicates that these ulcers were probably peptic in nature. The barium enema studies were essentially normal and x-rays of the teeth showed no evidence of absorption of the lamina dura. There is no description as to the bone structure; however, there may not have been any abnormalities at the time.



Figure 2. Upper GI film demonstrating prepyloric and duodenal ulcers.

"Laboratory work on this admission revealed a specific gravity of the urine of 1.009. There was no albumin and no sugar. I think this is important. At that time there was no real evidence of marked urinary tract disease except that 15 to 20 white blood cells were reported in the urine. Whether this was a voided specimen or a catheterized specimen is not stated. I think however that the 15 to 20 white blood cells would certainly correspond to some degree of low grade pyelonephritis that might have been secondary to the previously mentioned stones. The admission hemoglobin was 13.8 gm. and the hematocrit was 42 volume per cent. Sedimentation rate was 29 mm. The total white count was not remarkable.

BLOOD CHEMISTRY REPORT

"Her blood chemistry studies were the most important things reported during first admission other than the x-ray findings. The calcium was 12.9 mg. with the phosphorus 2.3 mg. These are not markedly abnormal findings, but the calcium level is slightly elevated. The phosphorus level is decreased with the normal usually being 3 to 4.5. The urea nitrogen was normal, being 13 mg. per cent. Repeat studies of the calcium and phosphorus on the following day were 12 mg. per cent and 1.8 mg. respectively. An alkaline phosphatase

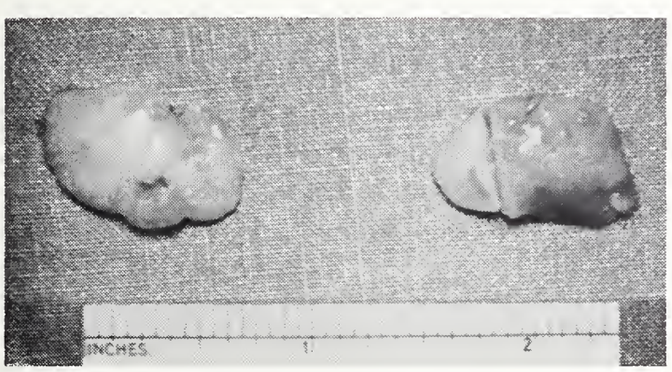


Figure 3. Adenomas of right lower and left parathyroid glands.

was 8 units. The CO_2 combining power was 28 mEq. per liter which is normal. A Sulkowitch test on two consecutive days was reported as a 3 plus. On the basis of this I think that the patient definitely had some hypercalcuria. The creatinine was 1.2 and the repeat blood urea nitrogen was 16 on Aug. 10. Further calcium and phosphorus studies were done and were 12.1 and 1.6 on one study and 11.1 and 2.4 on another study. The patient was then discharged from the hospital for further observation.

"She was readmitted approximately four months later on Dec. 18, 1960. She had been doing well until one week previously when she developed "ulcer pains" which were worse at night and back pain, nausea and vomiting. The laboratory data become fairly confusing and I am going to use them as I desire for this discussion. The admission urinalysis showed a specific gravity of 1.015 and this is important because it shows that the kidney can do some degree of concentration.



Figure 4. Microscopical picture of adenoma. Note rim of normal parathyroid along lower margin.

"There was a 3 plus sugar at the time and a blood sugar of 174. On the previous admission her urine sugar had been normal; so, I will have to do a little mental manipulation here to try to satisfy this elevation. The chlorides were 107 mEq. per liter, potassium was 3.3 mEq. and sodium 140 mEq. This is a little out of balance with the chlorides and sodium being in the normal range and the potassium being low.

"I think that several things happened in the time between the admission of this patient and the time the urinalysis and blood chemistries were obtained. The hyperglycemia, glycosuria, and the rather moderate decrease in the serum potassium are probably due to the patient receiving intravenous glucose solutions containing sodium chloride but without potassium. Prior to this she had lost fluids and electrolytes secondary to vomiting.

ADDITIONAL DATA

"The white count was 15,500 with 78 per cent neutrophils. The blood chemistries on the day following admission showed a calcium of 12 and a phosphorus of 2.1. The alkaline phosphatase was again 8. A Sulkowitch test, however, was only 1 plus, within the normal range. The calcium on Dec. 22 was 11.2 and the phosphorus was 2 mg. per cent. On Dec. 27, 11 days after admission,

an operation was performed. It would certainly be interesting to know whether this operation was done on the abdomen or whether the operation was done on the neck. I'm not sure whether the patient was being operated on for the ulcer or possibly for chemical abnormalities.

THREE ABNORMALITIES

"In my own mind this case revolves around three major areas of abnormalities. One is in the chemistries involved, particularly in the calcium and phosphorus group. The second abnormality is the presence of ulceration in the gastrointestinal tract, and as is previously stated, I believe that it is peptic ulceration. The third major abnormality is that the patient has renal stones. This patient certainly could have more than one disease. She possibly could have developed diabetes between her first and second admissions or she might have some rare conditions not related usually to calcium and phosphorus abnormalities. In trying to decide what this patient had, I thought first of conditions which usually cause hypercalcemia, and then with these in mind, tried to fit the presence of the renal stones and the peptic ulcers into the picture.

"There are several things that will cause hypercalcemia, but most do not fit into the picture presented by this patient. I will just mention them briefly. Hypervitaminosis D, which requires tremendous dosages of vitamin D, can cause an increase in the blood calcium level; however, there is usually an increase in the phosphorus level and secondary suppression of the parathyroid hormone with increased calcium absorption from the GI tract. We have no history that this patient has been taking large doses of vitamin D and the ordinary multiple vitamins would not contain enough vitamin D to cause this type of syndrome.

AT-10

"AT-10 or dihydrotachysterol is another preparation which has considerable influence on calcium and phosphorus metabolism. As a matter of fact it is very hard to distinguish the chemical and clinical effects of this agent from increased parathyroid activity. There is no history suggestive that the patient has taken this substance.

"Multiple myeloma is another cause of very high calcium levels. I don't think this patient would fit the picture, however. The protocol does not state anything about any particular bone lesions. Patients with multiple myeloma usually have a normal serum phosphorus. The urine calcium can be increased or normal. The alkaline phosphatase is usually normal also. One of the major things which helps rule out multiple myeloma in this patient is the normal serum proteins without an increase in the globulin fraction.

"Certain skeletal neoplasms or neoplasms involving the skeletal system secondarily can cause an increase in the serum calcium and an increase in the calcium excretion; however, again the serum phosphorus and phosphatase levels are usually normal. However, in one particular case, the osteogenic sarcoma, the phosphatase activity may be markedly increased. Acute bone atrophy such as occurs particularly in young children or teen-agers with fractures may be associated with moderate or slight increase in the serum calcium. Paget's disease is often associated with calcium elevation. The phosphatase activity however is greatly increased in these cases, considerably out of proportion to what it is in this patient.

MILK-ALKALI SYNDROME

"One of the more interesting syndromes which must be differentiated is the milk-alkali syndrome which occurs in ulcer patients who have been taking very large amounts of soluble antiacids and milk. The original papers stated that it was necessary that soluble antiacids be used; however, cases have been reported in which aluminum hydroxide was the antiacid being used. Most people feel that to develop the milk-alkali syndrome the patient must have renal disease. In the case being discussed, I doubt that there is sufficient renal disease to contribute to this syndrome. These patients usually have a considerable degree of alkalosis. They develop nausea and vomiting which is often interpreted as worsening of the ulcer. Therefore, the antiacids and milk are increased. The nausea and vomiting usually continues and the patient may become quite confused and lethargic. Coma and death may result. The calcium level is elevated. They have a definite alkalosis which is reflected by the CO_2 combining power and the phosphatase activity is usually normal. They have a normal urine calcium. I might state though that in hyperparathyroidism with renal disease a similar clinical picture can be obtained as is present in the milk-alkali syndrome. Patients with milk-alkali syndrome, usually do quite well when taken off of milk and antiacids and given intravenous sodium chloride solution to correct their alkalosis.

"Sarcoidosis has been reported as causing very large rises in the serum calcium. We would expect to have a suggestive history, adenopathy, or an increase in the globulin fraction of the proteins. The phosphorus level is usually normal in sarcoid.

"One interesting possibility in this patient is Cushing's syndrome. She had ulcers, is in the age group, and from the laboratory standpoint could have a mild diabetes. I certainly do not think that the strongly positive acetone would be representative of or purely secondary to the hyperglycemia of only 174. As previously stated, I think the hyperglycemia as reported here is secondary to treatment she received on admission.

DISCUSSER'S DIAGNOSIS

"I believe this patient has hyperparathyroidism, or primary hyperparathyroidism. The so-called chemical abnormalities which occur in hyperparathyroidism in the absence of severe renal disease are considered by most people as pathognomonic. One is the hypercalcemia. This patient certainly had a slight degree of hypercalcemia. It is not marked but definitely elevated. Occasionally in running multiple determinations normal values will be found. If you follow these patients for several months, they will sometime go into an apparent slight latent period or remission. The second main chemical abnormality is hypophosphatemia which this patient exhibited. The third is an increased urinary calcium, and I have to base this on the Sulkowitch test, which was reported as 3 plus on three occasions, and the presence of renal calculi. The fourth main chemical abnormality is an increase in the serum phosphatase activity, and this is usually a moderate increase. It is not in the range of obstructive liver diseases or the values seen in Paget's disease. I think that this patient fits well into this picture.

"There are other things that to me even emphasize it more. One is that 70 per cent of these cases are female. Twenty to 25 per cent of them have peptic ulcers while 15 to 20 per cent more have definite symptoms suggestive of peptic ulceration. Thirty to 70 per cent of them have renal complications. Exactly what per cent have renal stones I do not know. It was stated in two different articles which I read that 0.3 to 5 per cent of all renal stones are secondary to hyperparathyroidism. This morning I picked up an *Archives of Internal Medicine* from this past year and a group had done a survey of patients with peptic ulcerations to find out how many of these patients had hyperparathyroidism, and they found four cases out of 300. I believe that comes out of 1.3 per cent with definite hyperparathyroidism. I might change my mind after seeing the x-rays but I think this patient had hyperparathyroidism of the primary type. I think from a purely statistical basis that this would more likely be an adenoma, and that the operation was on her neck rather than her abdomen."

Dr. W. A. Smithson: "The operation was exploration of all the parathyroid glands. The right upper parathyroid was normal, but the lower was largely replaced by a tumor measuring about 2 cm. in maximum dimension. Then on exploration of the left side a mass of similar size and general appearance was found in the normal location of the left upper parathyroid. Both of these were confirmed as adenomas on frozen section."

SUMMARY

Dr. K. M. Heard: "As Dr. Wallace stated, adenoma of the parathyroid gland is the most common cause of primary hyperparathyroidism. Multiple adenomas are present in approximately 5 to 6 per cent of the cases. This, plus the fact that the fairly recently described entity of chief cell hyperplasia of the parathyroid glands exists necessitates exploration of all four parathyroid glands, as was done in this case. Dr. Smithson has told you that adenomas were found in the left upper and right lower parathyroid glands, each measuring approximately 2 cm. in maximum dimension (Fig. 3). Each of these presented a rather peculiar yellowish brown, homogenous, opaque cut surface. The microscopical picture of each of these is exemplified in Figure 4. In addition to chief cell overgrowth, follicle like formation is noted with a pink material resembling colloid present, the overall picture mimicking thyroid tissue.

"There are four main points to be made from this case of primary hyperparathyroidism.

1. Relatively slight increase in blood calcium with multiple studies.

2. The presence of two adenomas (multiple adenomas occur in approximately 5 to 6 per cent of cases of hyperparathyroidism).

3. The necessity for exploring all parathyroid glands in cases of suspected hyperparathyroidism due to a possibility of: a. multiple adenomas, b. primary chief cell hyperplasia involving all glands.

4. Relationship between endocrine adenomas and peptic ulceration. This has been noted also in cases of adenomas of the pancreas, pituitary, and adrenal glands." ★★★

1190 North State Street

MEETINGS

NATIONAL AND REGIONAL

American Medical Association, June 26-30, 1961, New York City. F. J. L. Blasingame, Executive Vice President, 535 N. Dearborn St., Chicago 10, Ill.

American Academy of General Practice, April 13-20, 1961, Miami Beach, Fla. Mr. Mac F. Cahal, Executive Director, Volker at Brookside, Kansas City 12, Mo.

American Society of Internal Medicine, May 5-7, 1961, Miami Beach, Fla. Mr. G. Tod Bates, Executive Director, 350 Post St., San Francisco 8, Calif.

Southern Medical Association, Nov. 6-9, Dallas, Texas. Mr. Robert F. Butts, Executive Secretary, 2061 Highland Ave., Birmingham, Ala.

STATE AND LOCAL

Mississippi State Medical Association, May 9-11, 1961, Biloxi. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson.

Mississippi Academy of General Practice, Sept. 27-28, 1961, Jackson, Miss. Miss Louise Lacey, Executive Secretary, Walthall Hotel, Jackson, Miss.

Mississippi Society of Internal Medicine, May 8, 1961, Biloxi. Frederick E. Tatum, Secretary, 707 Katie Ave., Hattiesburg.

Amite-Wilkinson Counties Medical Society, First Tuesday March, June, September, December. S. E. Field, Centreville, Secretary.

Central Medical Society, First Tuesday Monthly, 6:30 p.m., Robert E. Lee Hotel, Jackson. George E. Gillespie, 514-A East Woodrow Wilson Drive, Jackson, Secretary.

Claiborne County Medical Society. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Second Wednesday March and November, 2:00 p.m., Clarksdale. Robert R. McGee, 150 Yazoo Ave., Clarksdale, Secretary.

Coast Counties Medical Society, First Wednesday March, June, September, and November. Charles N. Floyd, 1412-23rd Ave., Gulfport, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday January, April, July, and October, 1:00 p.m., Hernando Motel Cafe, Hernando. L. L. Minor, Route 9, Memphis 9, Tenn., Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. A. Wayne Sullivan, 1204-21st Ave., Meridian, Secretary.

Homochitto Valley Medical Society, Fourth Tuesday Monthly, 7:30 p.m., Natchez Country Club, Natchez. W. T. Colbert, Natchez General Hospital, Natchez, Secretary.

North Central District Medical Society, Second Wednesday March and September. W. A. Middleton, 214 Summit St., Winona, Secretary.

Northeast Mississippi Medical Society, Second Tuesday March, June, September, and December, Tupelo. Thomas W. Wesson, 421 Main St., Tupelo, Secretary.

North Mississippi Medical Society, First Thursday January, April, and October, Oxford. R. L. Wyatt, Holly Springs, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. Samuel O. Massey, Jr., 220 E. Canal St., Picayune, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. Thomas F. Puckett, 715 Arledge St., Hattiesburg, Secretary.

Tri-County Medical Society, Second Tuesday March, June, September, and December. A. V. Beacham, Magnolia, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Tom H. Mitchell, The Street Clinic, Vicksburg, Secretary.

93rd Annual Session

Mississippi State Medical Association

Biloxi, May 9-11, 1961

MISSISSIPPI'S FABULOUS GULF COAST and the city of Biloxi will welcome the 93rd Annual Session of the association which, with concurrent medical meetings, offers six consecutive days of postgraduate education opportunity to physicians. Although a number of the Coast's finest hotels will play a major role in housing meeting activities and registrants, the session will be centered at the Buena Vista, meeting headquarters for the association and Woman's Auxiliary. Preparations have been made for the comfortable accommodation of more than 1,000 during the meeting complex.

The Scientific Assembly, House of Delegates, technical and scientific exhibits, and secretary's office will be located at the Buena Vista as will all sessions of the Woman's Auxiliary. Other participating hotels are the White House, Biloxi, Tradewinds, and Edgewater Gulf together with associated and adjacent motels.

More than 75 speakers will appear before a score of separate meetings including the seven formal scientific sections, Woman's Auxiliary, medical alumni groups, special breakfast, luncheon, and dinner occasions, and specialty society meetings. Distinguished guests will include Dr. Leonard W. Larson, Bismarck, North Dakota, president-elect of the American Medical Association; Mrs. A. E. Margulis, Santa Fe, New Mexico, member, Board of Directors, Woman's Auxiliary to the AMA; Mrs. Roy Douglas, Henderson, Tennessee, president-elect, Woman's Auxiliary to the Southern Medical Association; and an array of nationally and internationally known essayists, including two from Great Britain and Mexico, respectively, appearing before one of the specialty societies.

Combining recreational opportunities with the more serious business of postgraduate education and conduct of association affairs, physicians will enjoy the annual golf tournament at the Great Southern Country Club and the skeet shoot, both on May 10. The social highlight will occur on Wednesday evening, the annual banquet and dance. Mississippi, Tennessee, and Tulane medical alumni will sponsor dinner occasions.

As many as 500 early registrants are expected on Sunday, May 7, since most specialty societies have announced Monday meetings. Official beginning of the annual session will be the House of Delegates on May 9 with formal scientific section activity beginning the same day. Wednesday scheduling includes scientific activities, reference committee hearings, and social events. The session will conclude with the Thursday adjourned meeting of the House of Delegates when 1961-62 officers will be named.

Hotel reservations may be secured by writing Mr. Chris Thygesen, the Buena Vista, Biloxi, who is serving as housing coordinator.

OFFICIAL CALL

To all members of the Mississippi State Medical Association:

The 93rd Annual Session of the Mississippi State Medical Association is called to meet at Biloxi, Mississippi, on Tuesday, May 9, 1961, pursuant to Article V of the constitution. The House of Delegates will be convened at 9 o'clock a.m. at the Buena Vista.

The Scientific Assembly, consisting of the Sections on Eye, Ear, Nose, and Throat, General Practice, Medicine, Obstetrics and Gynecology, Pediatrics, Preventive Medicine, and Surgery, will meet during the period May 9-11, 1961.

No member or guest will be permitted to participate in any aspect of the annual session until regularly registered.

G. SWINK HICKS
PRESIDENT
WILLIAM E. LOTTERHOS
SECRETARY-TREASURER

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President
G. Swink Hicks, M.D.
Natchez

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Lawrence W. Long, M.D.
Jackson

Secretary-Treasurer
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Dr. Long

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	Jack V. King, M.D., Jackson
	Charles R. Jenkins, M.D., Laurel
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	J. Harvey Johnston, Jr., M.D., Jackson
Speaker	B. B. O'Mara, M.D., Biloxi
Vice Speaker	Howard A. Nelson, M.D., Greenwood
AMA Delegates	J. P. Culpepper, Jr., M.D., Hattiesburg
	John F. Lucas, M.D., Greenwood
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1914-1915	J. S. Ullman, M.D., Natchez
1931-1932	J. C. Culley, M.D., Oxford
1933-1934	John W. D. Dicks, M.D., Vicksburg
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1936-1937	Harvey F. Garrison, M.D., Jackson
1940-1941	William H. Anderson, M.D., Booneville
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1943-1944	E. LeRoy Wilkins, M.D., Clarksdale
1944-1945	B. L. Crawford, M.D., Tylertown
1946-1947	J. K. Avent, Sr., M.D., Grenada
1948-1949	R. B. Caldwell, M.D., Baldwyn
1949-1950	B. B. O'Mara, M.D., Biloxi
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1956-1957	H. C. Ricks, M.D., Jackson
1957-1958	Howard A. Nelson, M.D., Greenwood
1958-1959	Guy T. Vise, M.D., Meridian
1959-1960	Stanley A. Hill, M.D., Corinth

OPEN SESSIONS—HOUSE OF DELEGATES

All members, guests, and Auxiliary members are invited to attend the open session of the House of Delegates beginning at about 11:00 a.m., Tuesday, May 9, 1961, in Hurricane Room D, the Buena Vista. The program includes:

Remarks of the President

G. Swink Hicks, M.D., Natchez

Special Address

Leonard W. Larson, M.D., Bismarck, North Dakota, President-elect, American Medical Association

Thursday, May 11, 1961:

The Distinguished Service Oration

ACTIVITIES CALENDAR

REGISTRATION

General registration for the House of Delegates and the Scientific Assembly will be located in the Hurricane Foyer, the Buena Vista. No person will be admitted to any activity of the Annual Session without first registering. The Secretary's Office will be located in Rooms 142-144, the Buena Vista. Hours of registration are: May 8, 1:00 to 5:00 p.m.; May 9, 8:00 a.m. to 5:00 p.m.; May 10, 8:30 a.m. to 5:00 p.m.; and May 11, 8:30 a.m. to 1:30 p.m.

MONDAY, MAY 8, 1961

9:00 a.m. Miss. Association of Pathologists, Buena Vista, Card Room
9:30 a.m. Miss. Commission on Hospital Care, Buena Vista, Fiesta Room
12:00 noon Miss. Society of Anesthesiologists, Luncheon, Buena Vista, Sun Room
12:30 p.m. Miss. Chapter, American Academy of Pediatrics, Luncheon, White House, Magnolia Room
1:00 p.m. Miss. Society of Internal Medicine, Luncheon, Buena Vista, Lotus Room, South
1:30 p.m. State Surgical Division, U. S. Section, International College of Surgeons, White House, Palm Room
2:00 p.m. Miss. Urological Association, White House, Sun Room
2:30 p.m. University of Mississippi Medical Alumni, Board of Directors, Buena Vista, Sky Lounge
4:00 p.m. University of Mississippi Medical Alumni, Business Meeting, Buena Vista, Sky Lounge
4:30 p.m. Woman's Auxiliary to MSMA, Preconvention Executive Board, Buena Vista, Hurricane Room D
6:00 p.m. Miss. Association of Pathologists, Fellowship Hour and Banquet, Buena Vista, Sun Room
6:00 p.m. University of Mississippi Medical Alumni, Fellowship Hour and Seafood Jamboree, Buena Vista, Sky Lounge and Deck
7:00 p.m. Miss. Chapter, American Academy of Pediatrics, Fellowship Hour and Banquet, Buena Vista, Lotus Room, South
7:30 p.m. Miss. Urological Association, Fellowship Hour and Banquet, White House, Sun Room

TUESDAY, MAY 9, 1961

7:30 a.m. Woman's Auxiliary to MSMA, Continental Breakfast, All Auxiliary Members, Buena Vista, Sun Room
8:30 a.m. Woman's Auxiliary to MSMA, General Session, Buena Vista, Sun Room

9:00 a.m. House of Delegates, Buena Vista, Hurricane Room D
12:00 noon Miss. Radiological Society, Luncheon, Buena Vista, Fiesta Room
12:30 p.m. Fifty Year Club, Luncheon, Buena Vista, Card Room
12:30 p.m. Woman's Auxiliary to MSMA, Luncheon, Buena Vista, Lotus Room, Center and South
2:00 p.m. Section on Medicine, Buena Vista, Hurricane Room D
2:00 p.m. Section on Pediatrics, Buena Vista, Sun Room
2:30 p.m. Woman's Auxiliary to MSMA, Workshop, Buena Vista, Sky Lounge
3:00 p.m. Woman's Auxiliary to MSMA, Postconvention Executive Board, Buena Vista, Sky Lounge
3:30 p.m. Reference Committee on Reports of Officers and Board of Trustees, Buena Vista, Fiesta Room
6:30 p.m. University of Tennessee Medical Alumni, Fellowship Hour and Banquet, Buena Vista, Lotus Room, Center and South
7:00 p.m. Tulane University Medical Alumni, Banquet, Buena Vista, Sun Room

WEDNESDAY, MAY 10, 1961

7:30 a.m. Past Presidents' Breakfast, MSMA, Buena Vista, Card Room
8:00 a.m. Past Presidents' Breakfast, Woman's Auxiliary to MSMA, Buena Vista, Lotus Room, South
9:00 a.m. Section on Obstetrics and Gynecology, Buena Vista, Hurricane Room D
9:00 a.m. Section on Preventive Medicine, Buena Vista, Sun Room
10:00 a.m. Gulfport Medical Auxiliary, Coffee, All Auxiliary Members, Home of Mrs. M. M. Snelling
10:00 a.m. Council on Constitution and By-Laws, Buena Vista, Card Room
10:00 a.m. Reference Committee on Medical Practice, Buena Vista, Fiesta Room
11:30 a.m. Miss. Ob-Gyn Society, Fellowship Hour and Luncheon, Buena Vista, Lotus Room, South
12:00 noon Flying Physicians Association, Luncheon, White House, Sun Room
2:00 p.m. Section on General Practice, Buena Vista, Hurricane Room D
2:00 p.m. Reference Committee on Miscellaneous Business, Buena Vista, Fiesta Room
2:00 p.m. MSMA Nominating Committee, Buena Vista, Card Room
6:30 p.m. MSMA Fellowship Hour, All Members and Guests, Buena Vista, Sky Lounge
7:30 p.m. Annual Association Banquet-Dance, Buena Vista, Lotus Room, North, Center, and South

ACTIVITIES CALENDAR

THURSDAY, MAY 11, 1961

7:30 a.m. Southern Medical Association, Breakfast, Buena Vista, Sun Room (By Invitation)
9:00 a.m. Section on Surgery, Buena Vista, Lotus Room, Center and South
9:00 a.m. Section on EENT, Buena Vista, Fiesta Room
12:00 noon Section on EENT, Luncheon, Buena Vista, Sun Room
12:00 noon Mississippi Academy of General Practice, Luncheon, Buena Vista, Hurricane Room D
1:30 p.m. House of Delegates, Buena Vista, Lotus Room, Center and South

GOLF TOURNAMENT

The annual MSMA golf tournament will be held on Wednesday, May 10, 1961, at the Great Southern Country Club. Dr. B. B. O'Mara, Biloxi, tournament chairman, will furnish details to interested members.

SKEET SHOOT

The annual association skeet shoot will be held on Wednesday, May 10, 1961. Dr. Joseph Kuljis, Biloxi, chairman of the event, will supply details and directions to the range.

Welcome to Mississippi's magnificent Gulf Coast and your 93rd Annual Session. Stimulating scientific activity, recreation, entertainment, and fellowship are scheduled to afford you a professionally profitable and personally enjoyable session. Those in official capacities are at your service.

C. D. TAYLOR, JR., M.D.
General Chairman



DR. TAYLOR

EXECUTIVE BUSINESS

HOUSE OF DELEGATES

Tuesday, May 9, 1961
9:00 a.m.

The Buena Vista
Huricane Room D

B. B. O'Mara, M.D.,
Biloxi, Speaker

Howard A. Nelson, M.D.,
Greenwood, Vice Speaker



DR. O'MARA



DR. NELSON

MEETINGS OF THE HOUSE

The meeting will be opened by the President and the Speaker, in presiding over the House, will announce the order of business. The adjourned meeting will be opened at 1:30 p.m., Thursday, May 11, 1961, in the Lotus Room, Center and South. All meetings of the House will be held at the Buena Vista.

REFERENCE COMMITTEES

Reports, resolutions, and other business coming before the House will ordinarily be referred to a reference committee by the Speaker or Vice Speaker for hearing and recommendation. Any member of the association may appear before a reference committee on any matter being considered. Reference committees are scheduled to meet at the Buena Vista at the times and places shown.

Reports of Officers and Board of Trustees, Tuesday, May 9, 1961, Fiesta Room, 3:30 p.m.

Medical Practices, Wednesday, May 10, 1961, Fiesta Room, 10:00 a.m.

Constitution and By-Laws (Council), Wednesday, May 10, 1961, Card Room, 10:00 a.m.

Miscellaneous Business, Wednesday, May 10, 1961, Fiesta Room, 2:00 p.m.

Nominating Committee, Open Session, Wednesday, May 10, 1961, Card Room, 2:00 p.m.

THE SCIENTIFIC ASSEMBLY



Dr. Lotterhos

COUNCIL ON SCIENTIFIC ASSEMBLY

William E. Lotterhos, M.D., Chairman

THE SCIENTIFIC EXHIBIT

Lobby Level
The Buena Vista

THE TECHNICAL EXHIBIT

Hurricane Rooms A, B, and C
The Buena Vista

SCIENTIFIC SECTIONS

Eye, Ear, Nose and Throat
Medicine
Obstetrics and Gynecology
Pediatrics
Preventive Medicine
Surgery
General Practice
The Buena Vista

CONDUCT OF THE SCIENTIFIC ASSEMBLY

The order of exercise, papers, and discussions as set forth in the official program shall be followed until completion. When the program of a section is not completed in the time allotted, it shall not be permitted to continue into that assigned to another section. No paper or address shall occupy more than twenty minutes, except those of the President, Orator, and guests. In formal discussion, no one shall speak more than five minutes, and in informal discussion, no one shall speak more than three minutes and not more than one time. All papers read before the association shall become its property. Each paper must be read by its author and deposited with the Secretary (or Chairman of the Section) when read.

THE SCIENTIFIC EXHIBIT

Physicians, foundations, and organizations will present the Scientific Exhibit. Physician-members of the Mississippi State Medical Association are eligible for the Annual Gold Medal Award for excellence in scientific work. Guest exhibitors, foundations, and organizations do not participate for the medal but may receive recognition for outstanding presentations. The Scientific Exhibit is located in the Main and East Lobbies, Hotel Buena Vista.

EXHIBITORS

"Four Decades of Diuretics"
Ralph V. Ford, M.D., Edward W. Dennis, M.D., Alfredo C. Montero, M.D., and John A. Nickell, Houston, Texas

"Management of Shock in Gangrenous Bile Obstruction"
William O. Barnett, M.D., Jackson

"Modern Combined Drug Therapy in Toxemia Management"
Stanley F. Rogers, M.D., Houston, Texas

"Shotgun Wounds"
William R. Fain, M.D., J. Harold Conn, M.D., James D. Hardy, M.D., and J. Vardaman Cockrell, M.D., Jackson

"Treatment of Essential Hypertension"
Raymond F. Grenfell, M.D., Jackson

The Arthritis and Rheumatism Foundation, Mississippi Chapter

American Physical Therapy Association, Mississippi Chapter

The Jackson Council on Alcoholism

THE TECHNICAL EXHIBIT

The Mississippi State Medical Association presents with pride the 1961 Technical Exhibit. Established firms engaged in the manufacture and distribution of pharmaceuticals, supplies, equipment, and in providing varied services will present exhibits. Visit each exhibit often and discuss products and services with the Professional Service Representatives. Since the association conducts its scientific activity by section meetings, continuous viewing of exhibits during off-section schedules is possible and specific reservations of time are unnecessary for physicians to visit the Technical Exhibits. Only registered members and guests are admitted. The Technical Exhibit is located in Hurricane Rooms A, B, and C, the Buena Vista.

EXHIBITOR	BOOTH
Abars Pharmaceuticals, Jackson, Miss.	48
Abbott Laboratories, Chicago, Ill.	11
A. S. Aloe Company of Louisiana, Inc., New Orleans, La.	17 & 18
Ayerst Laboratories, Atlanta, Ga.	2
Baxter Laboratories, Inc., Morton Grove, Ill.	35
Bedsole Surgical Supply Company, Inc., Mobile, Ala.	44
The Borden Company, New York, N. Y.	4
Ciba Pharmaceutical Products, Inc., Summit, N. J.	13
The Coca-Cola Company, Atlanta, Ga.	3
Doho Chemical Corporation, New York, N. Y.	16
Eaton Laboratories, Norwich, N. Y.	46
Eli Lilly and Company, Indianapolis, Ind.	5
Geigy Pharmaceuticals, Yonkers, N. Y.	15
Health Insurance Council, Mississippi Committee	40
IBM Corporation, Jackson, Miss.	39
Jones Bros. Drug Company, Inc., Gulfport, Miss.	20
Kay Surgical, Inc., Jackson, Miss.	31
The Lanier Company, Jackson, Miss.	21
Lederle Laboratories, Pearl River, N. Y.	42
J. A. Majors Company, Dallas, Texas	7

Maltbie Laboratories, Belleville, N. J. 26
S. E. Massengill Company, Bristol, Tenn. 45
McNees Medical Supply Company, Jackson, Miss. 1
Mead Johnson and Company, Evansville, Ind. 43
Merck Sharp and Dohme, Philadelphia, Pa. 38
The William S. Merrell Company, Cincinnati, Ohio 9
Mississippi Hospital and Medical Service, Jackson, Miss. 24
Mutual Benefit Life Insurance Company, Newark, N. J. 37
The National Drug Company, Philadelphia, Pa. 22
Parke, Davis and Company, Detroit, Mich. 19
Pepsi-Cola Company, Atlanta, Ga. 41
Pfizer Laboratories, Brooklyn, N. Y. 27
William P. Poythress and Company, Inc., Richmond, Va. 12
A. H. Robins Company, Inc., Richmond, Va. 33
Roche Laboratories, Nutley, N. J. 34
J. B. Roerig and Company, New York, N. Y. 36
William H. Rorer, Inc., Philadelphia, Pa. 25
Sandoz Pharmaceuticals, Hanover, N. J. 8
Schering Corporation, Union, N. J. 23
G. D. Searle and Company, Chicago, Ill. 6
Southern Surgical Supply Company, Inc., New Orleans, La. 28
E. R. Squibb and Sons, New York, N. Y. 32
The Stuart Company, Pasadena, Calif. 29
The Upjohn Company, Kalamazoo, Mich. 10
U. S. Vitamin and Pharmaceutical Corp., New York, N. Y. 14
Warner-Chilcott Laboratories, Morris Plains, N. J. 47
Winthrop Laboratories, New York, N. Y. 30

REGISTRATION FOR EXHIBIT PRIZES

Visit the Technical Exhibits often and qualify for the drawing of attractive prizes. Secure your card showing the names of the exhibitors and obtain the necessary initials as you visit each booth. Deposit cards at Registration not later than 5:00 p.m., Wednesday, May 10. Exhibitors will initial cards only when in the possession of the physician whose name appears thereon and cards are not transferrable.

SECTION ON PEDIATRICS



DR. RICKS

Tuesday, May 9, 1961
Sun Room
Beginning at 2:00 p.m.

H. C. Ricks, Jr., Jackson
Chairman

Frank M. Wiygul, Jackson
Secretary

STRABISMUS AND THE A-V SYNDROME
John J. White, Jackson

CLINICAL FINDINGS IN PEDIATRIC CARE WHICH DO NOT REQUIRE MEDICAL OR SURGICAL TREATMENT
Milton J. E. Senn, New Haven, Connecticut
(Dr. Senn's appearance as a guest essayist is made possible by a grant from the Merck Sharp and Dohme Research Laboratories, West Point, Pennsylvania)

ELECTION OF 1962 SECTION OFFICERS
The Chairman Presiding (Only registered members of the section may vote)

SECTION ON MEDICINE



DR. MURPHEY

Tuesday, May 9, 1961
Hurricane Room D
Beginning at 2:00 p.m.

Eugene M. Murphey, III, Tupelo
Chairman

George S. Barnes, Columbus
Secretary

THE CLINICAL EVALUATION OF THYROID FUNCTION
A. Lewis Farr, Greenville

MANAGEMENT OF GASTROINTESTINAL HEMORRHAGE
N. Edward Rossett, Memphis

A DOUBLE BLIND STUDY OF THE TREATMENT OF HYPERTENSION
Raymond F. Grenfell, Jackson

RHEUMATOID ARTHRITIS—TYPICAL AND ATYPICAL
Thomas E. Weiss, New Orleans

THE STAGES OF MESENTERIC ARTERY DISEASE
John D. Reeves, Gainesville, Florida

ELECTION OF 1962 SECTION OFFICERS
The Chairman Presiding (Only registered members of the section may vote)

SECTION ON OBSTETRICS AND GYNECOLOGY



DR. LEWIS

Wednesday, May 10, 1961
Hurricane Room D
Beginning at 9:00 a.m.

Carl E. Lewis, Jackson
Chairman

Michael Newton, Jackson
Secretary

SURGICAL EMERGENCIES IN OBSTETRICS
Michael Newton, Jackson
RUPTURED UTERUS
C. G. Sutherland, Jackson
EMERGENCY DIAGNOSIS AND TREATMENT OF BLOOD COAGULATION DEFECTS IN OBSTETRICS AND GYNECOLOGY
Jack A. Pritchard, Dallas, Texas
EMERGENCIES IN THE IMMEDIATE POST PARTUM PERIOD
Isadore Dyer, New Orleans
ELECTION OF 1962 SECTION OFFICERS
The Chairman Presiding (Only registered members of the section may vote)

SECTION ON PREVENTIVE MEDICINE



DR. MORPHY

Wednesday, May 10, 1961
Sun Room
Beginning at 9:00 a.m.

A. N. Morphy, Gulfport
Chairman

P. T. Howell, Forest
Secretary

IMMUNIZATIONS, PAST, PRESENT, AND FUTURE
Blair E. Batson, Jackson
WHAT CAN MISSISSIPPI PHYSICIANS DO TO LESSEN ACCIDENT INJURIES AND DEATHS?
Paul V. Joliet, Washington, D. C.
LAWS, AUTHORITY AND RESPONSIBILITY IN PUBLIC HEALTH
A. L. Gray, Jackson
PRESENT STATUS OF VIRUSES IN CLINICAL MEDICINE AND PUBLIC HEALTH
Ralph B. Hogan, Atlanta, Georgia
ELECTION OF 1962 SECTION OFFICERS
The Chairman Presiding (Only registered members of the section may vote)

SECTION ON GENERAL PRACTICE
Inaugural Meeting

Wednesday, May 10, 1961
Hurricane Room D
Beginning at 2:00 p.m.

Robert J. Moorhead, Yazoo City
Chairman

Tom H. Mitchell, Vicksburg
Secretary



DR. MOORHEAD

WHEN CAN THE PATIENT WITH ANGINA PECTORIS AND/OR MYOCARDIAL INFARCTION RETURN TO WORK?

Robert S. Green, Cincinnati, Ohio

RECENT CONCEPTS OF TREATMENT OF FRACTURES AND ORTHOPAEDIC INJURIES FREQUENTLY CARED FOR BY THE GENERAL PRACTITIONER

Marcus J. Stewart, Memphis

PRACTICAL ASPECTS OF THE MANAGEMENT OF MYOCARDIAL INFARCTION

Dr. Green

BURSA, BURSITIS, TENDON, TENOSITIS WITH SPECIAL REFERENCE TO CALCIUM DEPOSITS

Dr. Stewart

ELECTION OF 1962 SECTION OFFICERS

The Chairman Presiding (Only registered members of the section may vote)

SECTION ON EYE, EAR, NOSE AND THROAT



DR. MCARTHUR

Thursday, May 11, 1961
Fiesta Room
Beginning at 9:00 a.m.

R. H. McArthur, Jr., Jackson
Chairman

S. G. Mounger, Greenwood
Secretary

MANAGEMENT OF FACIAL INJURIES
Richard T. Farrior, Tampa, Florida

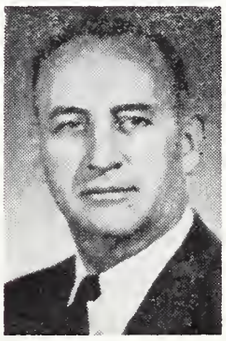
NEWER TRENDS IN RETINA DETACHMENT—MANAGEMENT, PREVENTION, AND TREATMENT
William F. Murrah, Memphis

EXTERNAL OTITIS, 1961
Edley H. Jones, Vicksburg

MYCOTIC EYE INFECTIONS
Thomas W. Wesson, Tupelo

ELECTION OF 1962 SECTION OFFICERS
The Chairman Presiding (Only registered members of the section may vote)

SECTION ON SURGERY



DR. DAVIS

Thursday, May 11, 1961
Lotus Room, Center and South
Beginning at 9:00 a.m.

J. T. Davis, Corinth
Chairman

J. T. Thompson, Moss Point
Secretary

CLOSURE OF WOUNDS OF THE HAND
J. T. Davis, Corinth

SURGICAL TREATMENT OF CAROTID INSUFFICIENCY, A COMMON CAUSE OF STROKES
Francis Murphey, Memphis

CHILDHOOD RECTAL PROBLEMS IN GENERAL SURGERY
R. E. Shands, New Albany

LOCAL ANESTHESIA IN MAJOR AND MINOR SURGERY
Donald M. Glover, Cleveland, Ohio

FRACTURE PROBLEMS
Leslie V. Rush, Meridian

ELECTION OF 1962 SECTION OFFICERS
The Chairman Presiding (Only registered members of the section may vote)

ESSAYISTS



Dr. Dyer

Isadore Dyer, M.D., New Orleans, Louisiana. Professor, Department of Obstetrics, Tulane University School of Medicine. Medical Degree: Tulane University School of Medicine, 1933. Diplomate, American Board of Obstetrics and Gynecology.



Dr. Farrior

Richard T. Farrior, M.D., Tampa, Florida. Medical Education: Duke University School of Medicine, 1949. Diplomate, American Board of Otolaryngology.



Dr. Glover

Donald M. Glover, M.D., Cleveland, Ohio. Clinical Professor, Department of Surgery, Western Reserve University School of Medicine. Medical Education: Harvard Medical School, 1920. Diplomate, American Board of Surgery.



Dr. Green

Robert S. Green, M.D., Cincinnati, Ohio. Director, Memorial Heart Laboratory, St. Mary's Hospital. Medical Education: University of Cincinnati College of Medicine, 1941. Diplomate, American Board of Internal Medicine.



Dr. Hogan

Ralph B. Hogan, M.D., Atlanta, Georgia. Chief, Laboratory Branch, Communicable Disease Division, U. S. Public Health Service. Medical Education: University of Nebraska College of Medicine, 1934. Diplomate, American Board of Preventive Medicine.

PAUL V. JOLIET, M.D., Washington, D. C. Chief, Accident Prevention Program, U. S. Public Health Service. Medical Education: St. Louis University School of Medicine, 1940. Diplomate, American Board of Preventive Medicine.



DR. JOLIET



DR. LARSON

LEONARD W. LARSON, M.D., Bismarck, North Dakota. President-elect, American Medical Association. Medical Education: University of Minnesota Medical School, 1922. Diplomate, American Board of Pathology.

FRANCIS MURPHEY, M.D., Memphis, Tennessee. Professor, Department of Neurological Surgery, University of Tennessee College of Medicine. Medical Degree: Harvard Medical School, 1933. Diplomate, American Board of Neurological Surgery.



DR. MURPHEY



DR. MURRAH

WILLIAM F. MURRAH, M.D., Memphis, Tennessee. Medical Education: University of Tennessee College of Medicine, 1943. Diplomate, American Board of Ophthalmology.

JACK A. PRITCHARD, M.D., Dallas, Texas. Professor and Chairman, Department of Obstetrics and Gynecology, University of Texas Southwestern Medical School. Medical Degree: Western Reserve University School of Medicine, 1946. Diplomate, American Board of Obstetrics and Gynecology.



DR. PRITCHARD



Dr. Reeves

John D. Reeves, M.D., Gainesville, Florida. Medical Education: University of Arkansas School of Medicine, 1947. Diplomate, American Board of Radiology.



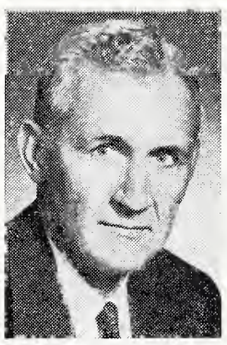
Dr. Rossett

N. Edward Rossett, M.D., Memphis, Tennessee. Medical Education: Yale University School of Medicine, 1938. Diplomate, American Board of Internal Medicine.



Dr. Senn

Milton J. E. Senn, M.D., New Haven, Connecticut. Professor, Department of Pediatrics and Psychiatry, Yale University School of Medicine. Medical Degree: University of Wisconsin Medical School, 1927. Diplomate, American Board of Pediatrics.



Dr. Stewart

Marcus J. Stewart, M.D., Memphis, Tennessee. Assistant Professor, Department of Orthopaedic Surgery, University of Tennessee College of Medicine. Medical Education: University of Tennessee College of Medicine, 1938. Diplomate, American Board of Orthopaedic Surgery.



Dr. Weiss

Thomas E. Weiss, M.D., New Orleans, Louisiana. Assistant Professor, Department of Clinical Medicine, Tulane University School of Medicine. Medical Education: Tulane University School of Medicine, 1940. Diplomate, American Board of Internal Medicine.

WOMAN'S AUXILIARY TO THE MISSISSIPPI STATE MEDICAL ASSOCIATION

38th Annual Session
The Buena Vista, Biloxi
May 8-10, 1961



MRS. REID

OFFICERS

MRS. LEE R. REID, Jackson
PRESIDENT

MRS. JOHN G. EGGER, Drew
PRESIDENT-ELECT



MRS. EGGER

ANNUAL SESSION CHAIRMEN

MRS. JAMES T. THOMPSON
Moss Point
General Chairman

MRS. ELDON L. BOLTON
Biloxi
General Co-Chairman

MRS P. E. WERLEIN
Biloxi
Publicity

MRS. KARL B. HORN
Moss Point
Luncheon

MRS. ROBERT A. MITCHELL
Gulfport
Decorations

MRS. JOHN B. SPRIGGS
Biloxi
Transportation

MRS. EUGENE A. TRUDEAU
Biloxi
Registration

PROGRAM

Monday, May 8, 1961

3:00 - 5:00 p.m. Registration, Mrs. E. A. Trudeau, Chairman
Lobby, The Buena Vista

4:30 p.m. Preconvention Executive Board Meeting
The Buena Vista, Hurricane Room D

AUXILIARY

Tuesday, May 9, 1961

7:30 - 8:30 a.m. Mrs. Lee R. Reid, Continental Breakfast for Auxiliary Members, The Buena Vista, Sun Room

8:00 a.m. Registration
Lobby, The Buena Vista

8:30 a.m. General Session, The Buena Vista, Sun Room
Mrs. Lee R. Reid, Presiding
Invocation
Mrs. J. P. Culpepper, Jr., Hattiesburg
Membership Pledge
Mrs. H. H. McClanahan, Columbus
Address of Welcome
Mrs. James T. Thompson, Moss Point
Response
Mrs. Mal S. Riddell, Winona
Presentation of Convention Chairman
Mrs. Eldon L. Bolton, Biloxi
Presentation of President-Elect
Mrs. John G. Egger, Drew
Introductions
Greetings from G. Swink Hicks, M.D.
President, MSMA
Greetings from Lawrence W. Long, M.D.
President-Elect, MSMA
Greetings from A. Street, M.D.
Auxiliary Advisory Chairman, MSMA
Report of AMA Auxiliary
Mrs. James T. Thompson, Moss Point
Report of SMA Auxiliary
Mrs. George W. Owen, Jackson
Greetings from SMA Auxiliary
Mrs. Roy Douglas, Henderson, Tennessee
President-Elect
Memorial Service
Mrs. H. C. Ricks, Sr., Jackson
Roll Call
Minutes
Recommendations of the Board
Other Business
Unit Presidents' Reports
Outstanding Program or Project
President's Report
Mrs. Lee R. Reid, Jackson
Credentials and Registration
Mrs. Eugene A. Trudeau, Biloxi

Report of the Nominating Committee
Mrs. James T. Thompson, Moss Point
Election of Officers
Appointment of Delegates to AMA Auxiliary
Courtesy Resolutions
Mrs. A. T. Tatum, Petal
Adjournment

12:30 p.m. Luncheon, The Buena Vista, Lotus Room, Center and South
Mrs. Karl B. Horn, Moss Point, Chairman
Mrs. Lee R. Reid, Presiding
Honoring Mrs. A. E. Margulis, Santa Fe, New Mexico, Director, Woman's Auxiliary to the AMA and Mrs. Roy Douglas, Henderson, Tennessee, President-Elect, Woman's Auxiliary to the SMA
Invocation
Mrs. Frank C. Massengill, Brookhaven
Introductions
Greetings from the AMA Auxiliary
Mrs. A. E. Margulis, Santa Fe, New Mexico
Installation of 1961-62 Officers
Mrs. Margulis
Presentation of Gavel and Pin
Response of Incoming President
Mrs. John G. Egger, Drew
Presentation of Past President's Pin
Mrs. A. Street, Vicksburg
AMEF Awards
Mrs. Arthur E. Brown, Columbus
Announcements
Adjournment

2:30 p.m. Presidents' and Presidents-Elect Workshop
The Buena Vista, Sky Lounge
Mrs. John G. Egger, Drew, Presiding

3:00 p.m. Postconvention Executive Board Meeting
The Buena Vista, Sky Lounge
Mrs. John G. Egger, Drew, Presiding

Wednesday, May 10, 1961

8:00 a.m. Past Presidents' Breakfast
The Buena Vista, Lotus Room, South
Mrs. James T. Thompson, Moss Point, Presiding

10:00-12:00 a.m. Gulfport Medical Auxiliary entertaining with "Coffee in the Garden"
Home of Dr. and Mrs. M. M. Snelling, 4803 Kendall Avenue, Bayou View, Gulfport

OTHER MEETINGS

MISSISSIPPI ASSOCIATION OF PATHOLOGISTS

The Buena Vista
Monday, May 8, 1961

WILLIAM P. FEATHERSTON, Jackson, *President*
LAWSON C. COSTLEY, JR., Tupelo, *President-Elect*
KENNETH M. HEARD, Jackson, *Secretary*

9:00 a.m. Scientific Program, Card Room
Seminar on Diseases of the Skin
Herbert Z. Lund, Greensboro, N. C.
12:00 noon Luncheon Recess
1:30 p.m. The Serum Osmolarity Test in Clinical Pathology Practice
Leo J. Scanlon, Jr., Jackson
Intestinal Infarction in the Absence of Mesenteric Thrombosis
Cloyd L. Ezell, Pascagoula
Changes in the Intestinal Mucosa Related to Aging
William P. Featherston, Jackson
Avoiding Malpractice Suits
John V. Cockrell, Jackson
A Method for Removing the Carotid Arteries at Autopsy
Kenneth M. Heard, Jackson
Helpful Hints for the Laboratory
Round Table Discussion
4:00 p.m. Annual Business Meeting
Recess
6:00 p.m. Fellowship Hour, Sun Room
7:30 p.m. Annual Banquet, Sun Room

MISSISSIPPI SOCIETY OF INTERNAL MEDICINE

The Buena Vista
Monday, May 8, 1961

JOHN G. ARCHER, Greenville, *President*
WILLARD H. BOGGAN, JR., Jackson, *President-Elect*
FREDERICK E. TATUM, Hattiesburg, *Secretary-Treasurer*

1:00 p.m. Luncheon, Lotus Room, South
Limited to Members and Special Guests
2:00 p.m. Scientific Program
Gout—1961
Thomas E. Weiss, New Orleans
A Case Study of Ascitic Fluid in a Cirrhotic Patient
J. Jerome Rinaldi, Gulfport
Business Meeting

MISSISSIPPI SOCIETY OF ANESTHESIOLOGISTS

The Buena Vista
Monday, May 8, 1961

CLARENCE H. WEBB, Jackson, *President*
THOMAS J. MARLAND, Jackson, *Vice President*
CURTIS W. CAINE, Jackson, *Secretary-Treasurer*

12:00 noon Luncheon, Sun Room
The Use of Muscle Relaxants in Infants and Children
E. M. Papper, New York, N. Y.

MISSISSIPPI UROLOGICAL ASSOCIATION

The White House
Monday, May 8, 1961

GEORGE W. VICKERY, Gulfport, *President*
JULIAN WIENER, Jackson, *President-Elect*
GERALD WESSLER, Gulfport, *Secretary*

2:00 p.m. Scientific Program, Sun Room
Human Renal Transplant in Identical Twins
John Menville, New Orleans
3:00 p.m. Pyelogram Clinic
4:00 p.m. Business Meeting
Recess
7:30 p.m. Fellowship Hour, Sun Room
8:30 p.m. Annual Banquet, Sun Room

MISSISSIPPI CHAPTER, AMERICAN ACADEMY OF PEDIATRICS

The White House
Monday, May 8, 1961

GUY C. JARRATT, Vicksburg, *Chairman*
LUTHER L. MCDOUGAL, JR., Tupelo, *Vice Chairman*
HOWARD H. NICHOLS, Jackson, *Secretary*

12:30 p.m. Luncheon, Magnolia Room
Members, Their Ladies, and Guests
2:00 p.m. Scientific Program
Role of the Pediatrician in Modifying Human Behavior
Milton J. E. Senn, New Haven, Connecticut
Goiters in Infants and Children
J. Darrell Smith, Jackson
4:00 p.m. Business Meeting
Recess
7:00 p.m. Fellowship Hour
The Buena Vista, Lotus Room, South
8:00 p.m. Annual Banquet, Lotus Room, South

OTHER MEETINGS

LOUISIANA-MISSISSIPPI OPHTHALMOLOGICAL AND OTOLARYNGOLOGICAL SOCIETY

The Edgewater Gulf
May 12-13, 1961

ARTHUR V. HAYS, Gulfport, *President*
CARL E. GRANBERRY, New Orleans, *President-Elect*
EDLEY H. JONES, Vicksburg, *Secretary*

Friday, May 12, 1961

8:00 a.m. Registration
8:45 a.m. Meeting Called to Order
Welcome of Guests and Extension of Floor Privileges
President Arthur V. Hays
Introduction of Newly Elected Fellows
President-Elect Carl E. Granberry
Announcements
Secretary Edley H. Jones
9:00 a.m. President's Address
Modern Progress in Otologic Surgery
Arthur V. Hays
9:30 a.m. Otolaryngologic Reconstructive Surgery
Richard T. Farrior, Tampa, Florida
10:45 a.m. Fenestration of the Oval Window, After Five Years (With Film)
John J. Shea, Memphis
Recess
Immediately following adjournment of the morning session at about 12:00 noon, there will be a meeting of the Louisiana Eye, Ear, Nose, and Throat Society.
2:00 p.m. Some Methods of Keratoplasty
Followed by the film, "A Method of Corneal Grafting"
Mr. A. G. Leigh, London, United Kingdom of Great Britain
3:15 p.m. Biomicroscopy in Retinal Detachment
Juan Heatley, Mexico City, D. F., Mexico
4:45 p.m. Council Meeting, Parlor E

Saturday, May 13, 1961

9:00 a.m. Gonioscopy in Non-Hypertensive Eye Conditions
Dr. Heatley
10:15 a.m. Lens Induced Uveitis
Mr. Leigh
Immediately following adjournment of the morning session at about 11:30 a.m., there will follow the Executive Session for Fellows only.
2:30 p.m. Vein Graft Tympanoplasty
Dr. Shea
3:45 p.m. Otolaryngology, 1961
Dr. Farrior

SCIENTIFIC EXHIBITS

Ophthalmodynamometry—An Aid in the Diagnosis of Cerebrovascular Disease
Robert A. Schimek, New Orleans

Fish Hook Injuries of the Eye—Their Prevention
G. B. Flagg, Gulfport

State of Louisiana Hearing Conservation Program
Wallace Rubin, New Orleans

Orbital Tumors
Gustav C. Bahn and James McComiskey, New Orleans

Corneal Transplant
Louis A. Breffeilh, Shreveport

Otosclerosis and Stapedectomy With Polyethylene Tube and Vein Graft
Harry Zoller, New Orleans

TECHNICAL EXHIBITS

There will be an excellent group of Technical Exhibits of particular interest to ophthalmologists and otolaryngologists.

ENTERTAINMENT FEATURES

There will be coffee hours each morning for the ladies and fellowship hours each evening. A dinner dance will be held on Saturday evening, May 13, 1961.

MEETING INFORMATION

For further information about the meeting, write Edley H. Jones, M.D., Secretary, 1301 Washington Street, Vicksburg, Mississippi.

HOTEL RESERVATIONS

For hotel reservations, write Mrs. Nan Meisner, Convention Manager, Edgewater Gulf Hotel, Edgewater Park, Mississippi, stating that you will attend the meeting.

OTHER MEETINGS

MISSISSIPPI COMMISSION ON HOSPITAL CARE

Members of the Mississippi Commission on Hospital Care have been called to meet on Monday, May 8, 1961, at the Buena Vista in the Fiesta Room at 9:30 a.m. Additional information will be supplied by Mr. Foster L. Fowler, executive director of the commission, Jackson.

INTERNATIONAL COLLEGE OF SURGEONS

Fellows of the State Surgical Division, United States Section, International College of Surgeons are invited to a brief business meeting on Monday, May 8, 1961, in the Palm Room, the White House at 1:30 p.m. Further details may be obtained from Dr. Lawrence W. Long, Jackson, Mississippi regent.

FIFTY YEAR CLUB

Members of the Fifty Year Club will be honored at a luncheon on Tuesday, May 9, 1961, at the Buena Vista in the Card Room at 12:30 p.m.

MISSISSIPPI MEDICAL ALUMNI

University of Mississippi medical alumni will meet at the Buena Vista on Monday, May 8, 1961. Registration will open in the Hurricane Foyer at 2:00 p.m. and the Nominating Committee will meet at the same hour. The Board of Directors will be convened at 2:30 p.m. in the Sky Lounge and the general business meeting will follow at 4:00 p.m. Evening sessions include the Ole Miss Fellowship Hour at 6:00 p.m. and a Seafood Jamboree at 7:00 p.m., both in the Sky Lounge and Deck. Tickets are $5 each and alumni may preregister by writing Mr. Charles William Price, Director of Alumni Affairs, University of Mississippi School of Medicine, Jackson. The Program Committee consists of Drs. James G. Thompson, Thomas E. Wilson, Jr. and William E. Lotterhos, all of Jackson.

OTHER MEETINGS

MISSISSIPPI RADIOLOGICAL SOCIETY

A luncheon meeting of the Mississippi Radiological Society will be held on Tuesday, May 9, 1961, at the Buena Vista in the Fiesta Room beginning at 12:00 noon. Officers are Drs. A. Wayne Sullivan, Meridian, president; Bernard T. Hickman, Jackson, president-elect; and J. K. Goodrich, Jackson, secretary-treasurer.

FLYING PHYSICIANS ASSOCIATION

Mississippi members of the Flying Physicians Association and non-member physicians interested in private flying will attend a luncheon at 12:00 noon on Wednesday, May 10, 1961, at the White House, in the Sun Room. Officers are Drs. Jack D. Daniel, Hattiesburg, chairman; James L. Royals, Jackson, co-chairman; and Ben M. Walker, Jackson, secretary-treasurer.

TENNESSEE MEDICAL ALUMNI

University of Tennessee medical alumni will enjoy a social hour and banquet in the Lotus Room, Center and South, on Tuesday evening, May 9, 1961, beginning at 6:30 p.m. The banquet will be served at 7:30 p.m. Dr. William O. Barnett, Jackson, is chairman.

TULANE MEDICAL ALUMNI

Medical alumni of the Tulane University School of Medicine will meet for a dinner occasion at 7:00 p.m. on Tuesday evening, May 9, 1961, in the Sun Room, the Buena Vista. Dr. Harry J. Schmidt, Biloxi, is chairman.

OTHER MEETINGS

PAST PRESIDENTS

Past presidents of the Mississippi State Medical Association and Woman's Auxiliary, respectively, will enjoy breakfast meetings on Wednesday morning, May 10, 1961, at the Buena Vista. Auxiliary past presidents will convene at 8:00 a.m. in the Lotus Room, South, and MSMA past presidents will meet at 7:30 a.m. in the Card Room.

SOUTHERN MEDICAL ASSOCIATION

An invitational breakfast meeting of Southern Medical Association officials will be held Thursday morning, May 11, 1961, in the Sun Room, the Buena Vista, at 7:30 a.m. Dr. Guy T. Vise, SMA councilor for Mississippi, is host.

MISSISSIPPI OB-GYN SOCIETY

Members of the Mississippi Ob-Gyn Society will meet in the Lotus Room, South, the Buena Vista, on Wednesday, May 10, 1961, at 11:30 a.m. for a social hour, luncheon, and scientific session. Officers are Drs. Michael Newton, Jackson, president; Frank L. Butler, Jr., McComb, president-elect; and John T. Kitchings, Jackson, secretary-treasurer.

EENT LUNCHEON

The Section on Eye, Ear, Nose, and Throat will sponsor its annual luncheon at the Buena Vista in the Sun Room on Thursday, May 11, 1961, at 12:00 noon. A meeting of the Mississippi EENT Association will follow.

MAGP LUNCHEON

Members of the Mississippi Academy of General Practice will enjoy a luncheon in Hurricane Room D, the Buena Vista, on Thursday, May 11, 1961, at 12:00 noon. The program will include a prominent speaker and Dr. J. P. Culpepper, Jr., Hattiesburg, is chairman.

JOURNAL OF THE
MISSISSIPPI STATE
MEDICAL ASSOCIATION

Volume II, Number 4

April 1961

EDITORIALS

Splinters and Sinews

WILLIAM E. LOTTERHOS, M.D.
Jackson, Mississippi

A STRONG WOOD BEAM isn't made of splinters. Rather, it is of straight grain, well seasoned, true and square. Resilience, tensility, and flexibility are among its characteristics. It is adaptable and durable. This is a fair and representative simile of official medical organization in the United States, meaning, of course, the local society, state association, and American Medical Association.

Logically, every physician should want this the case and, indeed, most do. Membership at the three levels of official medical organization is eloquent testimony of this choice. But this is not necessarily true of the whole of medicine. Some very few doctors appear to prefer a beam of wood with a ragged, cracked surface which splinters easily. Its tensile strength is minimal because it isn't sufficiently seasoned. The brittle nature of the beam is such that it possesses little resilience. Obviously, it's not durable. As the surface cracks splinter off, it is no longer true and square.

This is the unhappy story of splinter organizations in American medicine. A few are conceived in honesty of purpose and made up of sincere men. Others enjoy a less respectable genesis, suggesting a bitter overtone of jealousy and scorn. And finally, the motives of a very few such splinter groups cry out with hate and avarice. If American medicine ever embarks upon a deliberate, insane course of self-destruction, the splinter organization route will supply a modality of efficiency second only to the hydrogen bomb.

And exactly how does one discern between the ill-conceived medical splinter group and the like size legitimate organization, for example, the small specialty society?

For one thing, the splinter outfit usually claims for itself prerogatives, authorities, functions, and responsibilities obviously beyond any purview of reason. In short, it is a "cause" espouser. It thrives upon medical crisis, usually born in the private councils of its leadership, whereupon it promptly presumes to declare itself a messiah with a message. Cockroaches in the medical woodwork are a specialty with the splinter crowds and vindictiveness, arrogance, and epithets are their trademark and insignia. Because of paucity of membership and hard-core nucleus philosophy, they work mostly by mail, rivaling a farm supply order house in purchase and use of postage stamps. Their meetings are small and at the highest organizational level where the few hard-core leaders have themselves a Roman holiday replete with fire-eating speeches and hair-curling resolutions taking the rest of the world to task.

Secretary-Treasurer, Mississippi State Medical Association.

Working upon the doubtful premise that if-you're-not-for-us-then-you're-against-us, the medical splinter group is a voodoo cult with by-laws sticking pins in effigies of everything they don't like. Usually, the latter is a considerable segment of anybody not on the membership rolls.

Some splinter groups, apparently in a hurry to save everybody from everybody else, have had insufficient time to become acquainted with factual aspect of issues at stake. Seldom are their bulletins, newsletters, and personal communications overly burdened with objectivity. They are subjective and vague, tromping about the limitless realm of generality with loose assertions, calls to the cause, and dire threats to their enemies.

Now, there's a substantial difference between the splinter crowd and the small, legitimate medical organization. The latter needs no defense because it can stand upon a record of repute and sincerity. Few thoughtful physicians will experience difficulty in making an immediate distinction between the two.

To those who, through splinter groups, would decimate the bone and tissue of American medicine, hear this: The American Medical Association is ultimately the only sanctuary for the American physician in this difficult time. This is true because the physician *is* the AMA. His state medical association and his county society *are* the AMA. These elements are rods in the fasces of the medical republic, a fitting symbol of scientific, socioeconomic, and, quite frankly, political strength.

Were it not for the American Medical Association, there would probably stand today a Truman-Ewing memorial in some Washington park commemorating enactment of the Wagner-Murray-Dingell bill. Every physician-employee of the federal government—and that's every physician—could take his children to see it during sabbatical vacations, provided, of course, he had been sufficiently provident to conserve enough from the grocery budget to finance the trip.

Were it not for the American Medical Association, there would be no quality and quantity in medical education or medical care for the indigent through programs of action—not mere words and phrases of what's bad and what's evil.

But above all else, were it not for the American Medical Association, there would be something less than the American medical miracle of quality care in limitless quantity, the addition of two and a half decades to our lives in but half a century, a system of professional morality stronger than any law, and physicians armed to the teeth with skill, knowledge, and scientific weapons who are winning the battle against all disease.

Where were the splinter groups when all this has been happening? Where is their contribution to anything but self-serving purposes of questionable merit? Where are their programs of research? For that matter, where are their leaders when the Congress hears reasonable, dignified testimony from representatives of the AMA and state medical associations? Where are their committees when the executive branches of federal and state government sit with physicians in serious council?

Where are they? Out sticking pins in an AMA doll, screaming voodoo incantations of doom tomorrow, and churning up a new crisis to pour in the pot when their present stew has boiled away!

How will you have your medical lumber, doctor? In splinters or sinews? ★★★

1151 North State Street

Euthanasia

The subject of euthanasia is becoming alarmingly popular. There appears to be a new-found impetus among some medical and particularly nonmedical persons in this very dangerous area. One can notice an uncertainty among ourselves concerning the right and wrong of this. At times we find that we are almost forced to participate in



"Check your doctor's prescription with the latest articles."

discussion and debate on this subject. Sentiment favorable to such a thing is coming from people who present a very emotional appeal. For the most part, people outside of the profession have had the floor, so to speak, in urging the doctors of this country to consider this as part of their humanitarian approach to the relief of human suffering.

What these people do not realize is that they are directing their arguments to the wrong group. They do not know that permitting human beings to die is a complete antithesis to a physician's sworn responsibility. They are not aware of the many patients who have appeared to be on their death bed, and in whom every human hope was all but abandoned, who have recovered and resumed useful lives. If this had been part of the obligation of the medical profession through the years, how many patients of 20, 40, and 60 years ago, who were considered hopeless at that time, would have been permitted to die, only to find in the light of new knowledge that this type of attitude is barbaric and has no place in our profession.

What is advanced age? The answer to this question has been changed radically in the last 40 years. We are aware of a new horizon springing up among our colleagues for the future of mankind. Medical literature reflects the progress being made in the field of aging. We are now talking in terms of "anti-aging" compounds that are being investigated on a sound scientific basis. It is not unreasonable to assume—yes, even hope, that our present concept of old age will advance even more drastically in the future than it has in the past.

It seems to me that this is a very dangerous field in which to wander. To make the decision that would be necessary to practice euthanasia would be a very unnatural responsibility for any man to make. Certainly it is completely foreign to the profession of medicine. Let the ones who believe that this should be part of the American contribution to history direct their arguments to the judge-advocates or to the clergy. Either would be more logical to settle this question than the doctors because of the inherent nature of their training and environment.

As doctors we are committed to relieve suffering and preserve life. We can not modify this standard by adding the catabolic concept of euthanasia. The two standards are in conflict and would cancel each other out. There is nothing in our training that even remotely suggests this course of action. We can not advocate this as a way of life, because we don't know how.—T. J. M.

Erratum

A regrettable typographical error was made in JOURNAL MSMA's March issue (Vol. II, No. 3). In Dr. Guy T. Vise's article, "The Present Status of Smoking and Cancer of the Lungs," letters were transposed in the word "causal" so that it read "casual." This error occurred on pages 87, 88, and 89. The editors will greatly appreciate librarians and others who wish to retain JOURNAL MSMA on a permanent basis making a note of this mistake.

NEW MEMBERS

The following physicians have been elected to membership by their respective component medical societies in the Mississippi State Medical Association and the American Medical Association:

CARRIGAN, GLENN BORDEN, Meridian. Born Society Hill, S. C., April 21, 1896; M.D., Medical College of South Carolina, Charleston, 1920; interned South Carolina State Hospital, Columbia; residencies, New York University College of Medicine, one year, Yale University School of Medicine, New Haven, Conn., one year; member American Psychiatric Association; U. S. Naval Reserve, four years; elected Feb. 7, 1961, by East Mississippi Medical Society.

FISACKERLY, JAMES SAMUEL, Biloxi. Born Stewart, Miss., Dec. 26, 1913; M.D., Tulane University School of Medicine, New Orleans, La., 1938; interned Gorgas Memorial Hospital, Ancon, Canal Zone; EENT residencies, Gorgas Memorial Hospital, one year, U. S. Army Hospital, Portland, Maine, one year, and Johns Hopkins Hospital, Baltimore, Md., one year; Fellow American College of Preventive Medicine; certified by American Board of Preventive Medicine; Colonel U. S. Air Force, 21 years; elected Nov. 2, 1960, by Coast Counties Medical Society.

GRAHAM, ROBERT MARSHALL, Gulfport. Born Okolona, Miss., Oct. 28, 1927; M.D., Washington University School of Medicine, St. Louis, Mo., 1955; interned Charity Hospital, New Orleans, La.; internal medicine residency, Ochsner Foundation Hospital, New Orleans, one year, urology residency, Ochsner Foundation Hospital, three years; Private U. S. Army, one year; elected Nov. 2, 1960, by Coast Counties Medical Society.

JENKINS, CECIL GWINN, Jackson. Born Burkburnett, Texas, Sept. 7, 1928; M.D., Jefferson Medical College of Philadelphia, Pa., 1955; interned Baptist Memorial Hospital, Memphis, Tenn.; pediatrics residencies, LeBonheur Children's Hospital, Memphis, one year, John Gaston Hospital, Memphis, one year; Captain U. S. Army, two years; elected Jan. 3, 1961, by Central Medical Society.

PEACOCK, LAURA JEAN, Gulfport. Born Stuart, Iowa, Dec. 6, 1912; M.D., State University of Iowa College of Medicine, Iowa City, 1952; interned Edward W. Sparrow Hospital, Lansing, Mich.; elected Nov. 2, 1960, by Coast Counties Medical Society.

ROBERTSON, DAVID LYLE, Biloxi. Born Winchester, Kansas, May 21, 1908; M.D., University of Kansas School of Medicine, Kansas City, 1939; interned Emanuel Hospital, Portland, Oregon; urology residency, Veterans Administration, three years; surgery residency, Wichita General Hospital, Wichita Falls, Texas, one year; elected Nov. 2, 1960, by Coast Counties Medical Society.

RODRIGUEZ, JORGE ARROYO, Jackson. Born Mexico, Jan. 28, 1919; M.D., University of Mexico Medical School, Mexico, D. F., 1944; interned St. Mary's Memorial Hospital, Knoxville, Tenn.; thoracic surgery residencies, Massachusetts General Hospital, Boston, two years, St. Mary's Memorial Hospital, Knoxville, one year; surgery residencies, St. Mary's Memorial Hospital, Knoxville, one year, University Medical Center, Jackson, three years; member Mexican Society of Chest Diseases, American Association of Anatomists; elected Jan. 3, 1961, by Central Medical Society.

SPRIGGS, JOHN BERTHOLD, Biloxi. Born Greenville, Mich., Nov. 10, 1914; M.D., University of Michigan Medical School, Ann Arbor, 1941; interned U. S. Marine Hospital, Detroit; surgery residency, U. S. Public Health Service Hospital, Baltimore, Md., three years; member American College of Surgeons, International College of Surgeons; Diplomate, American Board of Surgery; elected Nov. 2, 1960, by Coast Counties Medical Society.

STONE, HENRY DECK, Batesville. Born Memphis, Tenn., May 15, 1930; M.D., Tulane University School of Medicine, New Orleans, La., 1954; interned East Tennessee Baptist Hospital, Knoxville; Lieutenant U. S. Naval Reserve, two years; elected Dec. 30, 1960, by North Mississippi Medical Society.

DEATHS

MARTIN, JOHN, Pope. M.D., Memphis Hospital Medical College, Memphis, Tenn., 1911; member, American Medical Association; served as member of the Medical Advisory Board for Selective Service during World War II and appointed by President Eisenhower as member of the Federal Advisory Board of Panola County; physician for the Illinois Central Railroad, 25 years; practiced in Panola County 42 years; died Feb. 15, 1961, aged 75.

PARKER, EDWARD CLIFTON, Gulfport. M.D., Tulane University, New Orleans, La., 1899; began practicing at Shelby, Ala., as physician for Shelby Iron Company in 1899 and practiced there for two years; spent the next two years at Hills Infirmary, Montgomery, Alabama, studying surgery under Dr. L. L. Hill; located at Gulfport in November 1903, and received his Mississippi license in 1904 by examination; studied in France, England, Germany, and Austria in 1914; served as a Captain in U. S. Army Medical Corps during World War I; spent 22 months with American Expeditionary Forces in France and Germany; was consulting surgeon for V. A. Hospital and Louisville and Nashville Railroad, Gulfport; elected to Fifty Year Club and emeritus membership on July 6, 1949; was a Fellow in the American College of Surgeons and served on the Board of Directors in 1933; was president of the Mississippi Chapter of American College of Surgeons in 1940; held the following offices in MSMA: vice president, 1912-13; chairman, Section on Surgery, 1913-14; alternate delegate to AMA, 1914-16; vice president, 1929-30; president-elect, 1933-34; president, 1934-35; chairman, Board of Trustees, 1948-55; Committee on Budget and Finance, 1943-44; MSMA member of Board of Directors, Mississippi Hospital and Medical Service, 1947-48; Fraternal Delegate to Alabama, 1956-57; died March 2, 1961, aged 86.

Domestic Journals

Psychiatric Emergencies. Eugene Ziskind: Calif. Med. 91:74 (Aug.) 1959.

Four psychiatric disorders that can frequently become emergencies are: the acute brain syndrome (toxic delirium), depression and suicidal tendency, hypomania, incipient schizophrenia. The cardinal symptoms of the acute brain syndrome are: confusion with disorientation (impairment of consciousness); hallucinations (often multiple and vivid); motor disturbances (usually hyperkinetic); and emotional disturbances (commonly fear).

Depressive patients are more likely to commit suicide in psychotic than in psychoneurotic depressions. In cases unassociated with psychomotor retardation, at times of holidays and anniversaries and in patients harboring suicidal preoccupations, the intensity of distress is the important thing to gauge. It is dangerous to rely on a patient's denial of intention to commit suicide where the evidence indicates that such ideas preoccupy his thoughts and plans. Even if the patient's intent to resist suicide is sincere, it loses its value when the depression becomes intensified. A possible suicidal risk is the recovering depressive patient, since he is less inhibited following the removal of his former psychomotor retardation, while at the same time his depression is still partially with him.

A hypomanic patient, because of his lack of insight, may inadvisably get in or out of marriage, illegitimate pregnancy, accidents or unpropitious business enterprises. One should mobilize all available family resources to impose safety curbs upon the patient. The patient's congenial manner may serve to make a truly necessary commitment extremely difficult. Nevertheless, even at the expense of a jury trial in which one fears the patient will probably appear convincing, commitment procedure may be necessary if the patient is to be prevented from utterly ruining his personal and vocational life.

Incipient schizophrenia presents a special problem because the earlier the treatment is instituted the greater the likelihood of satisfactory results. Schizophrenia presents diagnostic problems even for many psychiatrists and it is therefore to be expected that, in its earliest stages, the diagnosis of schizophrenia may be particularly difficult for the family physician. Neurotic-like symptoms with the impending sense of catastrophe, increasing withdrawal from occupational and social activities, eccentric, odd behavior, feelings of outside control of thoughts and emotions, sudden revelations, isolated hallucinations (particularly if auditory and meaningful), attributing special significance to irrelevant events, awkwardness of movements or postures—all these phenomena may be isolated, early manifestations of a serious schizophrenic disorder. Frequently, because of the family's reluctance to face an unpleasant prospect, such patients fail to be referred to the psychiatrist until the illness has progressed to a point at which the prognosis is relatively poor. The emphasis must, therefore, be on early recognition, early consultation, and early referral to the appropriate psychiatric resources.

Department of Psychiatry
University of Mississippi
School of Medicine

Public Affairs Pamphlet

Why Can't You Have a Baby? By Allan F. Guttmacher, M.D., and Joan Gould. Pamphlet, 20 pages. New York: The Public Affairs Committee, 1960. $.25.

Infertility has been a problem ever since Rachael had difficulty in bearing Jacob children. Roughly one marriage in seven in the United States is childless. A new Public Affairs Pamphlet, *Why Can't You Have a Baby?* attempts to explain the modern understanding of fertility and the steps that may be taken to aid childless couples.

The pamplet was written by Dr. Allan F. Guttmacher, director of the department of Obstetrics and Gynecology, Mount Sinai Hospital, New York City, and Joan Gould, a well-known medical writer.

The authors point out that there is no simple way to estimate a couple's chances until there has been a thorough medical examination. However,

they write that in general, one-third to one-half of the couples who go to fertility clinics succeed in having children.

"Age is the great enemy of fertility," Dr. Guttmacher and Miss Gould explain. "If a woman marries between the ages of 16 and 20, the chances are 96 in 100 that she will have a baby. Her chances drop steadily in her later twenties and thirties, so that those who marry between 30 and 35 have only 85 chances in 100."

The pamphlet describes in some detail the various tests that may be expected in a fertility clinic and some of the methods of treatment used today to strengthen fertility. It concludes by recommending that the childless couple consult a specialist in obstetrics and gynecology who is particularly interested in infertility cases.

The pamphlet may be secured for $.25 from the Public Affairs Committee, 22 East 38th Street, New York 16, N. Y.

Your Nursing Services Today and Tomorrow. By Elizabeth Ogg in cooperation with the National League for Nursing. Pamphlet, 28 pages. New York: The Public Affairs Committee, 1960. $.25.

The advance in modern medicine and the consequent reorganization of health services has brought about a basic change in the job of the professional nurse, according to a new pamphlet, *Your Nursing Services Today and Tomorrow,* released by the Public Affairs Committee.

Written by Elizabeth Ogg in cooperation with the National League for Nursing, the 25-cent booklet spells out for the general public the changes that have taken place and suggests what today's patient should expect from his nurses.

"The nursing team, with each member trained for the tasks assigned to her and alert to the emotional as well as the physical aspects of illness, gives you far more help than you could have expected 30 years ago from one nurse," Miss Ogg stresses.

"The rise of the nursing team is only one change that has taken place," the author continues. "There are many others, and new ones are coming along every day—new discoveries and developments that make . . . medical and nursing care more effective."

Among the other new developments covered in the pamphlet are what is known as progressive patient care and organized home care programs. Under progressive patient care plans the patients progress according to the phase of their illness from zone to zone where they receive specialized care, usually by nursing teams. The home-care programs represent an effort to get chronically ill patients out of the hospitals, where they tend to lose hope, to their homes. There they are served by a health team consisting of a doctor, public health nurse, and a social worker. Similar programs are being developed for patients discharged from mental hospitals.

Miss Ogg cites a seven-point patient's bill of rights published by the National League for Nursing to illustrate what the public has a right to expect from its nursing services today:

She writes that a patient has the right to expect:

1. That he will receive the nursing care necessary to help him regain or maintain his maximum degree of health.
2. That the nursing personnel who care for him are qualified, through education, experience and personality, to carry out the services for which they are responsible.
3. That the nursing personnel caring for him will be sensitive to his feelings and responsive to his needs.
4. That within the limits determined by his doctor, the patient and his family will be taught about his illness so that the patient can help himself, and his family can understand and help him.
5. That plans will be made with him and his family, or if necessary for him, so that, if possible, continuing nursing and other necessary services will be available to him throughout the period of his need. These plans will involve the use of all appropriate personnel and community resources.
6. That nursing personnel will assist in keeping adequate records and reports and will treat with confidence all personal matters that relate to the patient.
7. That efforts will be made by nursing personnel to adjust the surroundings of the patient so as to help him maintain or recover his health.

"Nursing is a big assignment," the pamphlet concludes, "demanding a broad education, personal maturity, and technical skills. We can mobilize more general public support for the kind of education that will prepare them to be the kind of nurses we need."

Your Nursing Services Today and Tomorrow is the 307th in the Public Affairs Pamphlet series which is now in its 25th year. The series has included many other distinguished titles covering social and economic problems, family relations, health, and intergroup relations. This pamphlet may be secured from the Public Affairs Committee, 22 East 38th Street, New York 16, N. Y. The cost is $.25.

Anesthesiologists Hold 16th Session in Jackson, Hear National Leaders, Tour Pilgrimage Cities

Dr. Charles S. Coakley of Washington, D. C., was named president of the Southern Society of Anesthesiologists at the group's annual meeting March 9-11 in Jackson. He succeeds Dr. Arthur S. Keats of Houston, Texas.



Physicians attending the March meeting of the Southern Society of Anesthesiologists in Jackson pose during a break. From left to right, front row, are Dr. John Adriani of Charity Hospital, New Orleans, La.; Dr. Arthur Keats of Houston, Texas, president of SSA; Dr. Clarence Webb of Jackson, president of the Mississippi Society of Anesthesiologists. Standing from left to right are Dr. Oral Crawford of Springfield, Mo., SSA vice president; Dr. Charles Allan of Galveston, Texas, and Dr. Lawrence W. Long of Jackson, president-elect of the Mississippi State Medical Association.

During the three day meeting the society heard some of the leading national figures in the field of anesthesiology. In all, 22 scientific papers were presented during the scientific sessions.

Governor Ross Barnett opened the meeting with Dr. Curtis Caine, Jackson, presiding over the beginning session.

In addition to the scientific sessions and business meetings, the program included trips to Natchez, Vicksburg, and historic Jackson landmarks. Attending anesthesiologists visited Vicksburg to see "Gold in the Hills" aboard the Steamer Sprague as a pre-convention trip on March 8. A post-convention tour to Natchez was scheduled for Saturday, March 11, including five plantation estates and the Pageant of the War between the States.

Jackson doctors who served as local committee chairmen for the meeting were Curtis Caine, general arrangements; Clarence H. Webb, Jr., exhibits; Thomas J. Marland, publicity. Mrs. Curtis Caine was chairman of ladies' activities.

The Southern Society of Anesthesiologists is one of the largest specialty organizations in the United States. It consists of anesthesiologists from all the Southern states and is now in its 16th year. The society was organized in 1946 following World War II, during which the specialty of anesthesiology received its greatest impetus.

Miller Addresses Northeast Society

Joe D. Miller, AMA field representaive, spoke to the March 14 meeting of the Northeast Mississippi Medical Society on recent medical legislation.

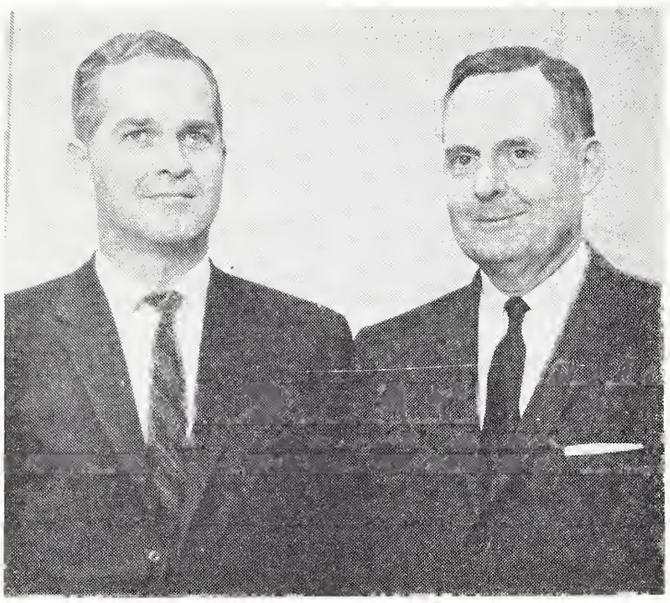
The meeting was held at the Goforth Lodge in Columbus with Dr. Frank M. Davis, president, presiding.

Miller addressed the society on fast-breaking events on the national legislative scene with particular emphasis on efforts by organized labor and the Kennedy administration to bring out a program of federally-sponsored medical care for the aged under Social Security. He discussed the position of AMA in support of public law 86-778, the Kerr-Mills program.

During the scientific session, Dr. J. T. Davis, Corinth, spoke on "Closure of Traumatic Wounds of the Hand" and Dr. Frank B. Hays, Columbus, talked on "Adverse Reaction to Steroid Therapy."

Marston Named UMC Director and Dean

Dr. Robert Q. Marston has been appointed director of the University of Mississippi Medical Center and dean of the medical school. He will assume his duties July 1, 1961.



University of Mississippi Chancellor J. D. Williams, right, and Dr. Robert Q. Marston of Richmond, Va., left, discuss Dr. Marston's recent appointment to the Medical Center directorship. He will assume his duties as UMC director and dean of the medical school on July 1, 1961. Dr. Marston succeeds Dr. D. S. Pankratz who resigned Feb. 15 in anticipation of mandatory retirement.

University Chancellor J. D. Williams announced selection of the 38-year-old Virginian for the top Medical Center post following approval on Feb. 16 of the Board of Trustees of the Institutions of Higher Learning.

Dr. Marston succeeds Dr. D. S. Pankratz who resigned Feb. 15 in anticipation of mandatory retirement.

The new director comes to Mississippi from the Medical College of Virginia in Richmond where he has been assistant dean and an associate professor of medicine.

The young educator's career includes two years as a Rhodes Scholar and five as a Markle Scholar.

Born in Toano, Va., in 1923, he graduated from Virginia Military Institute in 1943 and received his M.D. from the Medical College of Virginia in 1947. He earned his B.Sc. at Oxford during two years as a Rhodes Scholar.

Dr. Marston interned at Johns Hopkins and took additional training at Vanderbilt and at his parent medical college, joining the faculty there as an assistant professor in 1954.

His Markle Scholarship covered five years during which he taught at the Medical College of Virginia and the University of Minnesota. He is the author of numerous published papers on antibiotics, irradiation, and viruses.

Dr. Marston is an Episcopalian, a member of Alpha Omega Alpha honor society, the American Association for the Advancement of Science, the Society for Experimental Biology and Medicine, the Richmond Academy of Medicine, and the Medical Society of Virginia.

He is married to the former Ann Carter Garnett of Tappahannock, Va. Their two children are Ann, age 10, and Robert, age 8.

Physicians Study Infant Death Problem

Over a hundred physicians gathered to discuss the infant death problem at the Feb. 19 Southern Regional Conference of the American Medical Association's Committee on Maternal and Child Care.

Coming from 12 states and the District of Columbia, the doctors met in Atlanta, Ga. for an all day meeting including a preliminary progress report on AMA's nationwide perinatal mortality study.

Dr. Sydney H. Kane of Philadelphia, director of the study which began in January 1961, told the conference: "Our aim is a reduction in infant mortality as well as a reduction in incidents causing much pain and anguish to parents."

Dr. Philip S. Barba of Philadelphia, chairman of the AMA Committee on Maternal and Child Care, said about 800,000 babies die each year before or just after birth. In addition, he said, many children who survive have disabilities such as cerebral palsy or epilepsy or are mentally retarded. Dr. Barba is assisting Dr. Kane in the study.

Dr. Kane said 96 hospitals with approximately 168,000 births a year have enrolled in the pilot program so far. The study is being financed in part by the American Medical Research Foundation and the Univac Division of Sperry-Rand Corporation. Data is being collected by electronic tabulation equipment from hospitals in 38 states and Puerto Rico.

Dr. Howard A. Nelson of Greenwood, Miss., member of the AMA Committee on Maternal and Child Care, gave the opening address to the

conference. He told the group that "the purpose of the Committee on Maternal and Child Care is maximum reduction of mortality and morbidity as well as the improvement of maternal and child care.

"By identifying and classifying maternal deaths, research, and public education there has been a noticeable decrease in maternal deaths," he said.

Mississippians attending included Dr. Lois M. Mosey, Dr. Michael Newton, Dr. William E. Noblin, and Charles Mathews, MSMA assistant executive secretary, all of Jackson, and Dr. Joe N. Robinson of Columbus.

Speaker, Vice Speaker Call for Resolutions

Component medical societies sponsoring resolutions before the House of Delegates at MSMA's 93rd Annual Session, Biloxi, May 9-11, were urged to forward them to the association's Jackson office, according to a joint announcement by Drs. B. B. O'Mara, Biloxi, and Howard A. Nelson, Greenwood, speaker and vice speaker, respectively.

"If we are to provide the usual service of printing the resolutions in advance so that each delegate may have copies," Drs. O'Mara and Nelson said, "it will be necessary to receive them in the executive secretary's office by mid-April.

"This will enable every member of the house to have the full text of all proposals and insure fuller understanding of the business being transacted," they added.

Local societies are asked to forward resolutions drawn in the format used in annual issues of the *Transactions of the House of Delegates*. All such resolutions will be assigned identifying numbers, a definite spot on the business agenda, and a reference committee referral by the speaker and vice speaker.

Ob-Gyn Board Exams Set for April 8-15

The next scheduled exams of the American Board of Obstetrics and Gynecology will be held April 8-15 at the Edgewater Beach Hotel in Chicago, Ill. The entire board will conduct the Part II examinations.

Formal notice of the exact time of each candidate's examinations will be sent him in advance of the examination dates, according to Dr. Robert L. Faulkner, executive secretary-treasurer of the board.

The deadline for the receipt of new and reopened applications for the 1962 examinations is Aug. 1, 1961. Candidates are urged to submit their applications as soon as possible before that time.

ACS Crusade Chairman Speaks at State Meet

Twenty-five per cent of the cancer deaths in the United States could be avoided if people would get early medical attention and treatment, the national chairman of the American Cancer Society Crusade told the March 9 state crusade kick-off meeting in Jackson.



Conferring before the district Cancer Crusade Kick-off March 9 in Jackson are seated (left to right) Wallace Tudor, crusade chairman of the National Cancer Society, Mrs. W. C. Rhymes of Monticello, and Mrs. Leland Speed of Jackson. Standing are Jimmy Morrow of Brandon, John Gregg of Jackson, Dr. Joe G. McKinnion of Hattiesburg, Sam Waggoner III of Newton, and Dr. Forrest G. Brantley of Jackson.

Wallace Tudor, who shares his position as crusade chairman with Mrs. John F. Kennedy, told the meeting, "If the American people would show the interest in the cancer drive that they did in polio, we would be as advanced as polio research."

Tudor said that the American Cancer Society Crusade would begin in Mississippi and throughout the nation in April. The national goal for this year's fund raising effort is $30 million. Mississippi's share in this goal is $225,000.

Other Mississippi Cancer Society officials who spoke at the kick-off meeting were John E. Gregg, District 10 crusade chairman; Dr. J. G. McKinnon, division president; Joseph W. Carson, chairman, division public information committee, and Dr. Guy T. Gillespie, division board member.

AMA Denies It Considers Salk Vaccine 'Wasted'

In a strongly worded statement, the American Medical Association disagreed on March 1 with what it termed "a sensational story" distributed to Scripps-Howard newspapers to the effect that the AMA believes that more than "3,500,000 doses of Salk vaccine given so far have been wasted."

"This statement is untrue and does not reflect the official position of the American Medical Association relative to the Salk vaccine," said Dr. F. J. L. Blasingame, executive vice president of the AMA. "The Scripps-Howard story, emanating from Washington, leaves readers with a highly distorted and inaccurate picture."

The story was based on a correspondent physician's reply to a question from an unnamed Wisconsin physician which appeared in the February 25 issue of the *AMA Journal*. The correspondent, Dr. Herbert Ratner, Oak Park, Ill., health commissioner, said in part that "it is now generally recognized that much of the Salk vaccine used in the United States has been worthless."

"This," said Dr. Blasingame, "is the correspondent's opinion and not the opinion of the American Medical Association. Medical science advances because of conflicting viewpoints, and Dr. Ratner, a well-known public health leader, has a right to his opinion."

Dr. Blasingame clarified the American Medical Association's position regarding Salk vaccine by quoting a resolution adopted by the AMA House of Delegates at its clinical meeting in Washington, D. C., last December. The resolution said: "In view of the fact that oral polio vaccine will not be generally available in sufficient quantity in 1961 for any large scale immunizing effort, the Board of Trustees of the AMA strongly recommends that the medical profession encourage the widest possible use of the Salk vaccine for the prevention of poliomyelitis. The Salk vaccine has been proved to be effective and since there are still many segments of the population not immunized against poliomyelitis every effort should be made to encourage the general public to take advantage of the Salk vaccine without delay."

Dr. Cummings to Address State Trudeau Society

The Mississippi Trudeau Society will hold its Seventh Annual Meeting at the University of Mississippi School of Medicine on Wednesday, April 19, from 1:30 until 5:00 p.m., according to an announcement made by Dr. H. K. Stauss, Jackson, president.

The scientific program arranged for the 1961 meeting will feature an address by Dr. Martin M. Cummings, chairman and professor, Department of Microbiology, University of Oklahoma Medical Center, Oklahoma, Oklahoma, on the "Significance of Skin Reaction to Atypical Tuberculins."



Dr. Cummings

Other papers to be presented will include "A Series of Sarcoid Cases" presented by Dr. Jack Herring, assistant superintendent, Mississippi State Sanatorium, Sanatorium, Mississippi, and "Surgical Management of Tuberculosis in Children" presented by Dr. Jesse L. Wofford, Jackson.

The Mississippi Trudeau Society serves as the medical section of the Mississippi Tuberculosis Association. In this cooperative relationship, the Trudeau Society acts as the medical advisory board on all medical problems confronted by the Mississippi Tuberculosis Association.

In addition to the annual meeting of the society held in April each year, a joint meeting with the Trudeau Societies of Alabama and Louisiana is held in mid-January. This joint meeting is a consecutive case conference type meeting. All physicians interested in tuberculosis and pulmonary diseases are urged to make plans to attend the 1961 annual meeting of the society and are also invited to attend the annual consecutive case conference usually held on the Mississippi Gulf Coast.

Pfizer Aids Southern Flood Area

A major pharmaceutical manufacturer joined forces with physicians, local medical organization, and others working for the relief of south Missis-

sippi flood victims by contributing 100 pounds of antibiotics to the stricken area. Dr. Andrew Carroll, Hattiesburg, president, South Mississippi Medical Society, told association officials that the valuable contribution was made by Pfizer Laboratories, a division of Charles Pfizer and Co., Inc., Brooklyn, N. Y.

Arrangements for the gift of penicillin and Terramycin® were made by Mr. A. D. Griffin, Pfizer district manager for the area. Confirmation of shipment was made to Dr. Carroll in his capacity as president of the local medical society. The drugs will be made available to physicians and hospitals.

"This public spirited action by Pfizer is deeply appreciated by the medical profession and the public in our area," Dr. Carroll said. "The devastation is immense and every preparation is being made for possible problems arising out of pollution of public water supplies and sanitary facilities."

The late February-early March floods affected central and southern portions of the state but the Hattiesburg-Petal area was one of the most severely stricken.

State Tuberculosis Group Schedules April 20 Meet

The 49th Annual Meeting of the Mississippi Tuberculosis Association will be held Thursday, April 20, at the Robert E. Lee Hotel in Jackson, according to an announcement by Mrs. H. R. Whitten, president, of Charleston.

The theme of the 1961 meeting will be "The Big Push." Sessions for the education and enlightenment of volunteer workers of the 87 county tuberculosis associations will feature talks and demonstrations on effective programs for county tuberculosis associations to use in conducting their year-round tuberculosis control efforts.



Kehoe

Featured speaker of the meeting will be Clarence W. Kehoe, director, Christmas Seal Campaign Division, National Tuberculosis Association, New York City. Mr. Kehoe is a native of Illinois, having worked with the Illinois Division of Vocational Rehabilitation and the Illinois Tuberculosis Association prior to joining the national staff.

Other speakers include Dr. Clyde A. Watkins, superintendent of the Mississippi State Sanatorium; Miss Mary Elkin, associate director, Health Education Division, Mississippi State Board of Health; Mrs. J. N. Lockard, president, Jackson County Tuberculosis Association, Pascagoula; Miss Trugen Beard, health education chairman, Forrest County Tuberculosis Association, Hattiesburg.

A highlight of the meeting will be the presentation of 25-Year Certificates to volunteers who have given continuous volunteer service since 1936. A special tour of the State Historical Museum—The Old Capitol will also be included as a part of the program for delegates attending the meeting.

Mississippi Morbidity Report

The Mississippi State Board of Health reports the following occurrence of morbidity for 1961 through the eighth week of the year, ending February 24. Case totals reported are shown opposite the disease condition.

Tuberculosis, pul.	119
Tuberculosis, O. F.	5
Dysentery, bacillary	8
Infection, staph.	4
Infection, meningococcal	
Meningitis	5
Meningococcemia	2
Tularemia	1
Infection, encephalitis	2
Infection, mononucleosis	20
Puerperal sepsis	1
Diarrhea of newborn	1
Hepatitis, inf.	219
Helminthic inf.	
Hookworm	269
Ascariasis	51
Histoplasmosis	4
Meningitis, O. F.	17
Infection, strep.	
Scarlet fever	59
Strep. throat	431
Pertussis	6
Measles	134
Chickenpox	212
Mumps	103
Influenza	209
Gonorrhea	1,033
Syphilis	
Early	44
Late	40

Blood Banking Committee Meets in Jackson Feb. 9



Members of MSMA's committee on Blood and Blood Banking met Feb. 9 in the conference room of the headquarters building in Jackson. From left to right are Drs. R. H. Fenstermacher of Vicksburg; Catherine Goetz of Jackson, Kenneth Heard of Jackson, chairman of the committee, Lawrence W. Long of Jackson, Thomas F. Puckett of Hattiesburg, and C. B. Mitchell, Jr., of Meridian.

Tri-State Pediatrics Meet Set for April 14

Infectious children's diseases will be the subject of a tri-state symposium to be held April 14 at the Edgewater Gulf Hotel. Sponsors of the meeting are the Mississippi, Alabama, and Louisiana chapters of the American Academy of Pediatrics.

The all day meeting will feature six scientific papers and two panel discussions. Papers to be presented during the morning session are: "Beta Hemolytic Streptococcal Infections in Children" by Dr. Burtis B. Breese, clinical professor of pediatrics, University of Rochester School of Medicine and Dentistry, Rochester, N. Y.; "Treatment of Staphylococcal Infections in Children" by Dr. Heinz F. Eichenwald, associate professor of pediatrics, Cornell University School of Medicine, New York, N. Y., and "Infections of the Central Nervous System in Early Childhood" by Dr. Douglas N. Buchanan, professor of neurology and pediatrics, University of Chicago School of Medicine, Chicago, Ill.

Dr. Blair E. Batson, professor and chairman, department of pediatrics, University of Mississippi School of Medicine, will serve as moderator for the morning session.

During the afternoon, Dr. Chien Liu, associate professor of pediatrics, University of Kansas School of Medicine, Kansas City, Kan., will speak on "Infections in the Newborn." "Considerations of Respiratory Viral Infections" will be discussed by Dr. Robert H. Parrott, clinical professor of pediatrics, Georgetown University School of Medicine, Washington, D. C.

Dr. Randolph Batson, professor of pediatrics, Vanderbilt University School of Medicine, Nashville, Tenn., will talk on "The Use of the Newer Vaccines in Protecting Against Viral Infections."

Luncheon speaker, Earl Tucker, formerly of the *Thomasville Times,* Thomasville, Ala., is scheduled to talk about "How to Be Happy Even When You're Worried." The meeting will close with a reception in the Garden Room of the Edgewater Gulf.

No fee is required for attendance at scientific sessions, luncheon, or the reception.

1960 Booklet of Reviews Now Available from AMA

The latest edition of the annual publication "Reviews of Medical Motion Pictures" is now available upon request. It contains all of the reviews published in the *Journal of the American Medical Association* from Jan. 1 through Dec. 31, 1960. The purpose of these reviews is to provide a brief description and an evaluation of motion pictures for the medical profession. This booklet is prepared and distributed by the American Medical Association, Communications Division, Department of Medical Motion Pictures and Television, 535 North Dearborn Street, Chicago 10, Illinois.

Detailed Referrals Asked On State Charity Patients

The Board of Trustees of State Eleemosynary Institutions has asked Mississippi physicians to furnish more detailed information in referring patients to charity hospitals.

According to James C. Stubbs, executive secretary, the board requests that the referring physicians indicate on the referral slips whether or not they have examined the patient and that they give the charity hospitals the benefit of their professional findings and diagnosis.

"At the present time," said Stubbs, "some doctors give this information, while others do not." He noted that patients with more detailed information often receive admission and treatment much quicker than others.

400 Attend Conference On Handicapped Children

The Mississippi Conference on Handicapped Children was held Feb. 22-23 in Jackson with more than 400 members attending.

The second such conference to be held in Mississippi, it was sponsored by the Nemours Foundation and the Mississippi Children's Code Commission, and coordinated by the Junior League of Jackson.

Out of state participants included Dr. A. R. Shands, Jr., medical director of the Nemours Foundation of Wilmington, Del., a charitable organization whose purpose is to aid handicapped children. Dr. Blair E. Batson, chairman of the department of pediatrics at the University of Mississippi School of Medicine and conference chairman, introduced Dr. Shands, who spoke on the foundation's work during the Wednesday morning session.

Dr. Randolph Batson, a former Mississippian who is now professor of pediatrics at Vanderbilt University School of Medicine, Nashville, Tenn., spoke on "Medical Community Activities in Chronic Diseases."



Leaders in the Mississippi Conference on Handicapped Children, which met Feb. 22-23 in Jackson, are shown at a preconference party given by the Junior League. From left to right are Mrs. George Butler, Jr., Junior League president and co-chairman of the Junior League coordination committee for the conference; Dr. Thomas H. Blake, medical director of the State Crippled Children's Service; Mrs. Harrison Russell, co-chairman of the coordinating committee, and Dr. Estelle Magiera, director of Mental Health Services of the State Board of Health.

Sebe Dale, Jr. of Columbia, chairman of the Children's Code Commission presided over the opening session, and Governor Ross R. Barnett gave the welcoming address.

Other speakers at the Wednesday meeting included Dr. Raymond R. Rembolt, director of the University Hospital School for Handicapped Children, University of Iowa, Iowa City, Iowa, and Dr. William P. Hurder, associate director of Mental Health, Southern Regional Education Board, Atlanta, Ga.

Darrel J. Mase, Ph.D., coordinator, Florida Center of Clinical Services, University of Florida, Gainesville, Fla., talked on "Basic Essentials to Working Together" at the Wednesday night banquet.

At the Thursday morning program, Dr. Henry H. Work, department of psychiatry, University of California School of Medicine, Los Angeles, Calif., discussed "Doctor and Teacher—Cooperation in the School." Joseph H. Reid, executive director of the Child Welfare League of America, New York City, spoke on "Preventing Emotional Disorders in the Socially Handicapped Child."

The conference closed with a session featuring group reports from the six panel discussions of the previous day, a report of the resolutions committee by Dr. Harvey F. Garrison, Jr., of Jackson and summation remarks on the conference by Dr. Shands. M. H. Brooks, state commissioner of public welfare, presided at the closing session.

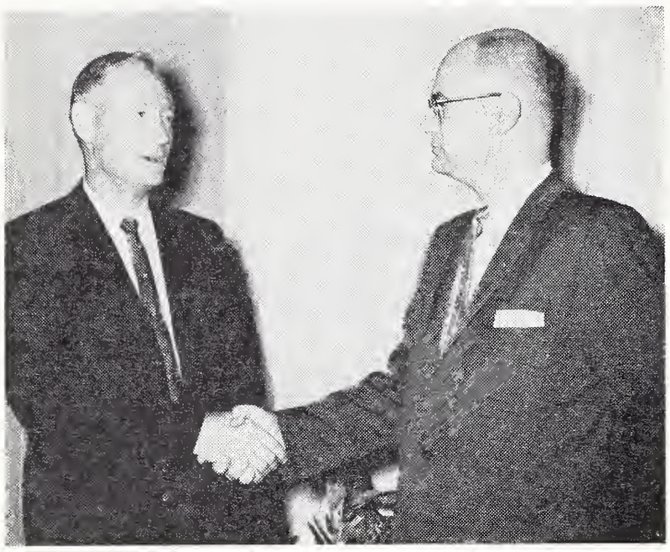
American Heart Group Schedules 1961 Meet

The 1961 Annual Meeting and Scientific Sessions of the American Heart Association will be held Oct. 20-24 in Bal Harbour, Miami Beach, Fla. The 34th annual Scientific Sessions are scheduled from Friday, Oct. 20, through Sunday, Oct. 22, in the Americana Hotel.

May 15 has been set as the deadline for submitting abstracts of papers to be presented at the Scientific Sessions. Papers intended for presentation must be based on original investigations in, or related to, the cardiovascular field.

Official forms for submitting abstracts may be obtained from Dr. Richard E. Hurley, medical associate, American Heart Association, 44 East 23rd Street, New York 10, N. Y. Applications for scientific exhibit space, due May 15, are also available from Dr. Hurley.

Jones Society Hears Talk On Nuclear Experiments



Dr. Shelby W. Mitchell, president of the Jones County Medical Society, welcomes Dr. A. D. Suttle, Jr., director of the Mississippi Industrial and Technical Research Commission. Dr. Suttle spoke to the society on nuclear experiments planned in salt domes near Purvis in South Mississippi.

Dr. A. D. Suttle, Jr., director of the Mississippi Industrial and Technical Research Commission, Jackson, was the guest speaker for the Feb. 21 meeting of the Jones County Medical Society.

Dr. Suttle spoke on the physical and chemical aspects of the proposed nuclear experiments in South Mississippi.

Dr. Shelby W. Mitchell of Ellisville, newly elected president of the society, presided over the meeting which was held at the Laurel Country Club. Dr. F. M. Shell of Laurel was program chairman.

Kerr-Mills Is Best Answer, Says Blasingame

The problem of medical care for the aged can be solved quickly and permanently "if politics can be abandoned in the interest of humanity," according to Dr. F. J. L. Blasingame, executive vice president of the American Medical Association.

Dr. Blasingame said that passage of the Kerr-Mills Medical Aid for the Aged Law by Congress last summer "gave the American people a sensible, workable solution to the problem of providing full medical care to all the elderly who need such care."

The AMA executive vice president said that the association, after careful study of President Kennedy's complete, six-point health care message, "finds much to applaud in the over-all program."

"We support the broad principles and the general goals of the President's program, but we cannot support his proposal for hospitalization and nursing home care for persons over 65 under social security," he said.

"In fact, after studying this section of the President's plan, the AMA more strongly than ever reaffirms its support of the Kerr-Mills Law (Public Law 86-778).

"The Kerr-Mills Law, when properly implemented by all the states, will do far more for deserving elderly citizens of our country at far less cost than the unrealistic, limited, and coercive proposal to graft hospital and nursing home services onto the Social Security System," Dr. Blasingame said.

He urged President Kennedy, members of Congress, labor leaders, and "all others truly interested in our needy aged" to unite in a common effort to persuade state legislatures, as American physicians are doing, to embark swiftly on Kerr-Mills programs to the end that "the hopes of millions of needy elderly can be fulfilled."

He said six states and two U. S. possessions already have Kerr-Mills programs functioning and other states are moving ahead with surprising swiftness.

He pointed out that the Kerr-Mills Law authorizes the states, with federal funds as well as their own, to furnish full medical care to all needy and near-needy citizens over 65, including hospital and nursing home care, drugs, services of physicians and specialists, and anything else required.

On the other hand, the King and Anderson bills, introduced a few days ago, would restrict benefits to hospitalization, nursing home and home nursing care and could be available only to those over 65 who would qualify for other social security benefits," Dr. Blasingame said.

"These measures would deny even these limited services to millions of the poor and destitute who can never qualify for social security. These among our citizens are most in need of help."

Dr. Blasingame said the administration proposal would "favor the rich at the expense of the poor."

He pointed out that every hospitalized patient would be required to pay $10 a day toward hospital charges for the first nine days—at a total of $90—plus all nonhospital expenses.

"Thousands on social security would be unable to afford such a drain on their resources. Led to believe they were getting something for nothing, they would find the program a cruel jest. But those who could afford to pay all their own expenses could pay the $90 and get a free ride for all the rest of their hospital charges. And the working people of America would pick up the tab."

Dr. Blasingame stated that:

—First-year cost for full implementation of the Kerr-Mills Law is estimated at $202 million for the federal government, $60 million for the states. First-year cost of the administration proposal is conservatively estimated at $1.1 billion.

—There is considerable question that the administration program would be "self-supporting" as the President claims because the Social Security Trust Fund, the financing mechanism for the President's plan, has been running in the red since 1957 and further obligations on the fund could bankrupt it.

—The Kerr-Mills Law can be available now for all those who need medical care plus those who can meet regular day-to-day living expenses but would be unable to meet the cost of a serious illness, or an illness that lasted a long time. The administration plan, if enacted, would not be available for another 20 months for hospitalization care and more than two years for nursing home and home nursing services.

—The President's program is unnecessary. The Kerr-Mills Law will do the job. The social security approach would add an extra tax burden, already becoming intolerable, on the backs of the working people for a program to benefit the privileged rather than the needy.

—The administration program is a scattergun approach which misses the target—full medical care for those who need it. Kerr-Mills hits the target, caring for those who need care, with the requirements of each state determined by its own people.

The AMA official said that "many, many Americans besides physicians, who are concerned with the subtle erosion of our freedoms, are convinced that health care through social security would socialize the free practice of medicine to the everlasting detriment of the American people. We should never forget that when the physician is socialized, the patient is also socialized. We believe freedom of medicine is as vital as freedom of the press and freedom of religion."

Dr. Blasingame added that the administration program represents "the foot-in-the-door" technique.

"If it is adopted it would obviously be the beginning of a continuously expanding program. This is the history of social security."

He said that to contend the administration program would guarantee free choice is "sheer sophistry."

"Abraham Ribicoff, secretary of Health, Education and Welfare, admitted in a recent news conference that only those hospitals agreeing to abide by rules and regulations he sets down would be available to patients," he said.

"These measures would empower the HEW secretary to interfere with hospital operations in all manner of ways, including the setting of 'reasonable' charges. Government controls of hospitals—socialism by any definition—would be effectively established."

Dr. Blasingame also criticized attempts to define the administration program as "prepayment" of insurance for future benefits.

"Federal agencies as well as the United States Supreme Court have clearly declared on more than one occasion that social security contributions are taxes and are not insurance premiums," he said.

"The concept has been legally acknowledged that social security taxes on workers' incomes provide money for current benefits to aged beneficiaries."

Dr. Blasingame said that if the problem of medical care for the aged is as critical as the administration contends, the states should proceed with Kerr-Mills programs as rapidly as possible, not only because such programs would solve the problem, but do it faster.



"We must have taken a wrong turn!"

Kosciusko Hospital Officially Dedicated

The new Kosciusko Hospital was officially dedicated March 5 before a crowd of interested citizens and medical representatives.

Dr. A. L. Gray of Jackson, state health officer, was the principal speaker at the program held on the grounds in front of the hospital.

Constructed under the Hill-Burton act, the hospital was financed jointly by federal and county funds. Construction was planned and was supervised by the Mississippi commission on hospital care, local hospital commissioners, the Attala board of supervisors, and officials of the United States public health service.

The new structure will continue to be known as the Montfort Jones Memorial hospital. Mrs. Montfort Jones contributed generously to the hospital program for many years, and the structure was named for her late husband, a Kosciusko resident.

The exterior of the 65-bed facility is of buff brick and concrete. The hospital contains 32,000 square feet of floor space. It was built at a cost of about $1,000,000. There are about 21 private rooms and 22 semi-private rooms.

Administrator Daniel B. Watson heads a staff of 90 persons, including 19 licensed practical nurses, two anesthetists, and three laboratory and x-ray technicians.

Alcohol Study School Set for August 6-11

The first Southeastern School of Alcohol Studies will be held August 6-11 at Millsaps College. The school will be sponsored by official state alcoholism programs in Region IV of the U. S. Public Health Service.

The decision to enlarge the nine-year-old Mississippi Summer School of Alcohol Studies to include other states was made Sept. 15, 1960, according to Mrs. Vashti I. Cain, director of alcohol and narcotics education, State Department of Education, and longtime director of the school.

States to be included in the 1961 study course are Alabama, Florida, Georgia, Maryland, Mississippi, Missouri, New York, North Carolina, Pennsylvania, and South Carolina. The sponsoring state agencies will furnish staff members to serve as the school's faculty augmented by guest speakers.

State Arthritics Spend $3 Million on Quackery

Over $3,500,000 was spent last year by Mississippi arthritis sufferers for misrepresented drugs, "wonder" devices, and fraudulent treatments for the disease.

These figures were released by Dr. Ronald W. Lamont-Havers, medical director of the Arithritis and Rheumatism Foundation, during his Feb. 22 visit to the Mississippi chapter.

He said this figure represents only a small part of the $250,000,000 spent annually in this country for "radiation" cures, liniments, ointments, herbs, and devices which may be damaging both psychologically and physically as well.

Currently on a tour of the South, Dr. Lamont-Havers met with leading medical representatives in Jackson to discuss city, county, and state programs concerning arthritis.

He congratulated the local chapter here during his visit for their beginnings toward rehabilitation work. Two pilot projects are presently in the mill. A loan closet of self-help devices for arthritis and rheumatism sufferers is being established in the Columbus area under the direction of Dr. George Barnes and Mrs. John Billups.

In addition, a mobile physical therapy unit has been approved as a project for the Hinds County



"Just read the letters—I'm not interested in whether or not it makes sense."

area. Completion of this project will depend on the availability of funds and of qualified physical therapists to staff the unit.

Members of the executive board of the Mississippi Chapter of the Arthritis and Rheumatism Foundation are Mrs. Elizabeth Wates, W. F. Goodman, Dr. A. Gayden Ward, Sen. Hayden Campbell, Travis McCharen, Mrs. Ralph Avery, Dr. Durward L. Blakey, and Dr. S. H. McDonnieal, all of Jackson, Dr. F. C. McDuffie, Dr. J. R. Snavely, and J. T. Gilbert of the University Medical Center, Dr. Edward Attix of Hattiesburg, Mrs. John Billups and Dr. George Barnes of Columbus, Dr. Emma Van Gay of Gulfport, and Frank Colley, regional representative of ARF of Atlanta.

Mid-South Holds Meeting, Names State Doctor VP

Dr. Gilbert J. Levy, Memphis, Tenn., pediatrician, was named president-elect of the Mid-South Postgraduate Medical Assembly at the 72nd Annual Meeting Feb. 14-17. He succeeds Dr. Omar Simmons of Newton, Miss.

Dr. Everett Crawford of Tylertown, Miss. was elected vice president of the assembly along with Dr. J. Malcolm Aste of Memphis, Dr. John Price of Monticello, Ark., and Dr. Gil M. Kinzer of Huntsville, Ala. Dr. Moore Moore, Jr., of Memphis is secretary-treasurer.

Speakers for the three-day meeting included some of the outstanding medical authorities in the United States. Dr. Mark B. Coventry, orthopedic surgeon associated with Mayo Clinic, Rochester, Minn., described the clinic's success with osteotomy in cases of painful hip due to degenerative changes during increasing years.

"This operation seems to reverse progressive changes and, in some patients, actually creates an improved condition," Dr. Coventry said. He explained that hip joints seem to wear out sooner than other joints possibly because of the alteration in circulation or because the hip's ball and socket arrangement allows little play for excessive stress.

After reviewing surgical ways of treating painful hip used in this country, Dr. Coventry explained the European procedure of osteotomy which he and his group have been doing for seven years at Mayo with encouraging results in selected patients.

The procedure involves cutting through the thigh bone just below the hip joint, displaying the thigh bone and moving it inward.

"We don't know exactly why it works," he said. "Success may be due to the fact that the operation alters the forces of stress and strain which act on the hip. New bony patterns form which appear able to take weight-bearing forces to better advantage," he concluded.

Dr. Bentley P. Colcock, general surgeon with Lahey Clinic in Boston, Mass., addressed the assembly on the different management of duodenal and gastric ulcers. "Cancer can practically be ruled out in ulcer of the duodenum," he told the attending physicians. "But gastric ulcer always raises a question. Is it ulcer or ulcerating cancer? Diagnosis can be established only by removing that part of the stomach containing the ulcer."

Dr. Colcock recommended surgery for duodenal ulcer only in cases of perforation, obstruction, hemorrhage or when the patient fails to respond to medical treatment.

"We feel the stomach ulcer patient deserves a short trial of medical treatment to see whether the ulcer will heal. But he must be kept under close observation," he said. "If the ulcer doesn't completely heal within a few weeks, the patient should be operated on to make sure it is not cancer."

There is evidence that many common diseases of the gastrointestinal tract, such as gallstones and peptic ulcer, may be inherited, Dr. Charles E. Jackson, director of clinical research at Caylor-Nickel Foundation in Bluffton, Ind., told the assembly.

The specialist in internal medicine emphasized the importance of obtaining the patient's family history for the part it may play in diagnosing these conditions.

Other speakers included Dr. George Crile, Jr., surgeon with the Cleveland Ohio Clinic, and Dr. J. H. Ebbs, senior physician in the Hospital for Sick Children in Toronto, Canada.

Cardiac Conference Proceedings Now Available

Proceedings of a national conference on Cardiac Work Evaluation Units, sponsored by the American Heart Association last May in Harriman, N. Y., are available at 75 cents a copy from the association or its local affiliates.

The 70-page booklet covers reports on current purposes, research potentials, minimum and recommended professional practices in the units, and a panel discussion on the future of such units.

Participants in the conference included cardiologists, internists, psychiatrists, psychologists, social workers, rehabilitation counselors, and representatives of employment and rehabilitation agencies of the U. S. Government.

Gulfport G.P. Enters Law School

Dr. Fred H. Walker, 35, who has been a general practitioner in Gulfport for about four years, is now enrolled in the University of Mississippi law school.

Dr. Walker, who gave up his medical practice to enter Ole Miss on Feb. 6, is believed to be the first medical doctor enrolled in the law school in the over 100-year history of the school.

Dr. Walker holds a bachelor of arts degree and a medical certificate from the University of Mississippi and received his medical degree from Baylor University at Houston, Texas, in 1954.

After a three-year course of study at Oxford, Dr. Walker will return to Gulfport where he will be associated with his brother Harry G. Walker in the practice of law. Another brother, Dr. C. A. Walker, Jr., is a Gulfport dentist.

Dr. Perry Named President Of Homochitto Society

Dr. Alton R. Perry, Natchez eye, ear, nose, and throat specialist, was elected president of the Homochitto Valley Medical Society at the group's March meeting. Dr. Perry succeeds Dr. Fred Geisenberger.

Dr. Thomas H. Gandy was elected vice-president and Dr. Walter T. Colbert was named secretary and treasurer. Dr. Edwin M. Butler was named to the board of directors. All the officers are from Natchez.

The program featured picture slides on "The Disability Decision," a film based on the Social Security Disability Program.

Convalescent Home Planned For Lackey Hospital

Plans are now underway for the addition of a 30-bed convalescent home to the S. E. Lackey Memorial Hospital in Forest. The proposed addition would cost around $300,000 with the local government providing $100,000.

Surry Grafton, administrator of the hospital, said that the convalescent home would be able to care for chronically ill patients, who are not in need of hospital services, at about one-third the daily room cost of regular hospital rates.

Grafton said, "Affiliation of a convalescent home with a hospital carries with it many advantages. Through this arrangement better medical care is possible through the use of the medical staff and the diagnostic and treatment facilities of the hospital. The patient can be immediately transferred to the hospital for treatment and long term patients can be easily moved when hospital services are no longer required."

In addition, said Grafton, the home would prevent a shortage of hospital beds in the area by taking in the convalescing patients.

Pfizer Builds Poultry Diagnostic Lab in Forest

A new Poultry Diagnostic Laboratory of Charles Pfizer and Company, Inc. is now under construction in Forest, the heart of Mississippi's poultry area.

The drug firm's lab, which is scheduled to be completed and fully-equipped by late spring, will offer free services to any Scott County or state resident, according to Dr. Hilmer L. Jones, head of Pfizer's department of veterinary medicine. Dr. Jones said that the laboratory was designed to materially contribute to Mississippi agriculture through the use of effective diagnostic procedures for uncovering and identifying costly diseases facing broiler and egg producers.

When completed, the Pfizer laboratory will cover 3,600 square feet. Included will be isolation wards for birds, and large autopsy room with separate facilities for a complete and accurate diagnosis of poultry diseases.

Students Kiss and Run—to a Doctor

Rodin's two lovers in the famous statue, "The Kiss," may not have caught infectious mononucleosis for their pains, but a group of equally amorous Wisconsin students did

The plight of the young Wisconsinites was revealed in a clinical study reported by Dr. Alfred S. Evans in the February issue of *GP,* a magazine published by the American Academy of General Practice.

Dr. Evans, professor and chairman of the department of preventive medicine at the university, related the mononucleosis findings in the course of a comprehensive discussion of viruses and the differential diagnosis of common respiratory diseases.

He notes that this debilitating illness, which affects the lymphatic system, has a reputation for being transmitted by "osculatory activity," and implies that it constitutes a kind of occupational hazard for college students.

The suspicion was given earlier scientific purchase by an investigator named Hoagland, who did his work with West Point cadets. Dr. Hoagland, the author says, found that 71 of 75 mononucleosis casualties from the Long Gray Line owned up to kissing girls they left behind them within 50 days before contracting the malady. The incubation period is 32 to 49 days.

Dr. Evans is too chivalrous to conclude these were the only Kaydets engaged in amorous adventure; it is presumed that, as in battle, they were the ones the fates chose should fall.

Following this whimsical citation, the author brings up reinforcements for Dr. Hoagland's premise, in the form of his own institution's students. His controlled study at Wisconsin, he states, has revealed nothing to refute the concept advanced by the earlier investigator.

"I'm embarrassed to say," opines his tongue-in-cheek admission, "that the Wisconsin student is engaging in this type of osculatory activity almost as often as the West Point cadet, and that infectious mononucleosis patients seem to have a special talent for it."

He notes that in his study's control group—patients with other illnesses who are used for comparison purposes with the mononucleosis victims —only about half reported "intimate oral contact," while three-fourths of the mononucleosis patients stated they had kissed within the incubation period.

Dr. Evans concludes that "infectious mononucleosis has some potential of being one socially accepted disease in which amorous conquests can be credited without social censure." In effect, a week in the infirmary with mononucleosis could be viewed as an amatory badge of honor.



Copyright 1961, Mississippi State Medical Association

"How do you apologize for giving an ice water enema to the wrong patient?"

American Ob-Gyn Group Plans 1961 Clinical Meet

A program of postgraduate courses will be offered this year for the first time by the American College of Obstetricians and Gynecologists in conjunction with its 10th Anniversary Clinical Meeting April 20-28, 1961, at the Americana Hotel, Bal Harbour, Fla.

Five courses will be held from April 21-23. They will include genetics, statistics, radiation physics, parenteral nutrition, and steroid metabolism.

Each will be led by an authority in that field. A co-leader for each session will demonstrate the subject's practical application to obstetrics and gynecology.

More than 2,000 specialists and their guests are expected to attend the general clinical session from April 24-28. Latin American obstetricians and gynecologists have been invited to join their colleagues from the United States and Canada.

Closed circuit medical color television will be added by the college this year. Three clinical operations will originate from Jackson Memorial Hospital, Miami, Fla.

In addition to the program of 26 lectures by doctors, there will be 240 breakfast conferences, 92 clinical conferences, and nine correlated seminars to permit discussion of special topics by small groups.

Purpose of these meetings is to disseminate to as many as possible the benefits of new information and techniques in this rapidly developing specialty.

Differing viewpoints on obstetric anesthesia will be discussed at a closing panel in cooperation with the American Society of Anesthesiologists. Activities of local Maternal Mortality and Morbidity Committees will be reviewed at a conference earlier in the week.

The college's 10th birthday will be celebrated and founders honored at a special program. Election and installation of officers also are on the agenda.

AMA Joins Polio Drive For Babies, Breadwinners

With 40 per cent of the nation's population not yet inoculated against polio, the American Medical Association announced today that it is taking the leadership again this year with the U. S. Public Health Service and the National Foundation in an all-out drive to stimulate state and county medical societies throughout the country in a spring polio campaign.

"Polio still remains a serious health menace," said Dr. Julian P. Price, Florence, S. C., chairman of the AMA Board of Trustees, "and state and county medical societies will be urged to cooperate with the U. S. Public Health Service and the National Foundation in getting more people to take their polio shots."

The AMA, the Public Health Service, and the National Foundation are cooperating at the national level in the drive, dubbed the "Babies and Breadwinners" campaign for 1961.

Dr. Price said the campaign will be aimed primarily at the younger age groups in the lower economic area and is designed to stimulate all-out effort by the local organizations.

Dr. Price announced that the Advertising Council of New York again is volunteering its services in launching the 1961 polio campaign in April.

"Timing of the campaign is important," Dr. Price said, "in order that everyone can receive at least three polio shots before the summer polio season."

He said that success of the campaign depends on joint activity at the local level. The local campaigns, sponsored by medical societies, boards of health, and voluntary health agencies, will be tied in with the nationwide campaign.

The AMA leader assured all sponsoring groups of receiving wholehearted cooperation from the more than 2,000 state and county medical societies throughout the country.

"Contrary to recent reports," Dr. Price said, "the AMA is strongly behind every effort to encourage the public to take advantage of the Salk vaccine without delay. This is the official policy of the AMA as enunciated in a resolution adopted by the AMA House of Delegates at a meeting in Washington, D. C., last December."

He pointed out that this year's campaign is an extension of similar drives led by the AMA the last three years in an effort to persuade every unvaccinated person to protect himself, his family, and his neighbors with Salk vaccine shots.

Dr. Price said that 38 per cent of all children five years old and younger have not yet been inoculated against polio. In addition, 63 per cent of men, aged 20-40, and 48 per cent of the women in this age group have not been inoculated. A high proportion of this group is from low income areas.

"These are segments of the population never reached by previous polio appeals and they should be the special targets in the 1961 polio campaign. As long as 'islands of unvaccinated persons' exist even within well-vaccinated communities, polio epidemics remain a serious threat. Consequently, the campaign should be directed primarily toward low income groups not normally reached by private physicians in their offices or even by special polio clinics."

Goals and priorities for the '61 program follow:

1. Every person should be fully immunized against polio.

2. Immunization campaigns should be intensive in neighborhoods with less than 85 per cent vaccination in groups under age 6, where epidemics are most likely to occur.

3. The first priority groups to receive "complete and early coverage" should be infant and pre-school groups under 8 years of age. Other children under 10 and parents of young children comprise the second priority group.

Dr. Price urged that all community-sponsored polio immunization programs be planned and carried out in close cooperation with local medical societies. He said that the schedule of Salk vaccine shots will remain about the same—the second shot to be given one month after the first, the third, seven months after the second or before the next polio season, and the fourth one year later. This applies to all persons except infants under 6 months.

Operation Kiss Highly Recommended

An editorial in the February *Journal of the Florida Medical Association* has a great deal to say about Operation KISS. Despite its romantic name, Operation KISS is a member of that multitudinous species—government projects. In short, it stands for "Keep It Simple, Stupid."

The author, Dr. John M. Packard, observes that it would be "delightful" if the government would follow its own advice, but also advises physicians to put Operation KISS into effect in their own offices. Specifically, he recommends clearer instructions to patients, more concise case histories, and above all, better prepared articles submitted for publication in the medical literature.

Says Dr. Packard, obviously a long-suffering editor, "Length or verbosity is no substitute for unadorned facts presented in a straightforward manner."

Public Warned Against Health Machine Quacks

Hucksters of quack health machines continue to fluorish because of the public's gullibility and legal loopholes, according to *Today's Health* magazine.

An article in the magazine, published by the American Medical Association, said health machine quacks have robbed Americans of millions of dollars and lured them away from legitimate, ethical medical treatment of serious diseases. The paper was written by Jack Kaplan.

Mechanical quackery is believed to make up a substantial portion of the $610 million or so paid to medical charlatans annually.

"Authorities hesitate to quote exact figures, however, believing that any sum they come up with is only a surface manifestation—turned up by their inevitably limited policing—of the real loot of the medical racketeer," the article said. "In this sense, authorities believe that all estimates of phony device quackery are conservative."

The machine quack makes his devices out of odds and ends of metals, wire, and radio parts, the article explained.

"With these gadgets—impressive to the gullible because of their flashing light bulbs, ticks, and buzzes—he then carries out a vicious medical con game, capitalizing on people's respect for the electrical and atomic wonders of our scientific age," it said. "He milks the latest scientific advances, translating them into his own special Buck Rogers vocabulary to huckster his fake machines as a cure-all for everything. . . ."

The economic toll that the device quack extracts is important, of course, the article continued. "But it is our health—more precious than all the money in the world—that these modern witch doctors with their fake therapeutic gadgets are gambling away," it said, adding:

"In such diseases as cancer, tuberculosis, and heart disease, early diagnosis and treatment are so vital that the waste of time by the patient with Doctor Fraud's cure-all gadgets can prove fatal. Moreover, the diabetic patient who relies on cure by the quack device and therefore cuts off his insulin intake can be committing suicide.

"The evidence shows that fake therapeutic machines, substituted for valid medical cures, have hastened the deaths of thousands."

Authorities emphasize that many intelligent, middle-class people have been conned by preposterous device panaceas, and older persons are a prime target of the quacks, according to the article.

The Food and Drug Administration wages a continuous battle against such charlatans, but the government agency readily admits its enforcement powers are restricted by certain limitations.

"For one thing, Federal laws provide only a year in jail and $1,000 fine for initial offenders in machine quackery—hardly a strong deterrent considering the rich potential loot," the article pointed out. "The gadget quackster has shown to date that he can do a good job of playing hide-and-seek with enforcement officials by changing the name of the gadget or lying low for a while."

The answer seems to lie in public education and in strengthening enforcement procedure against them, particularly on the state level, the article said.

"More than anything else, all authorities are agreed, we must plug the loopholes in the weak legislation and law enforcement at the state level," it said. "About half the states do not have effective antiquackery laws."

All authorities also agree that consumers, as potential victims, "must learn to evaluate statements of quacks, pitchmen, house-to-house canvassers, and other promoters who prey on ignorance in medical and nutritional fields," it said.

Here are the AMA Bureau of Investigation's rules of thumb for spotting a quack.

Beware:

—If a "medical expert" uses a special or "secret" machine or formula he claims can cure disease.

—If he guarantees a quick cure.

—If he advertises or uses case histories and testimonials to promote his cure.

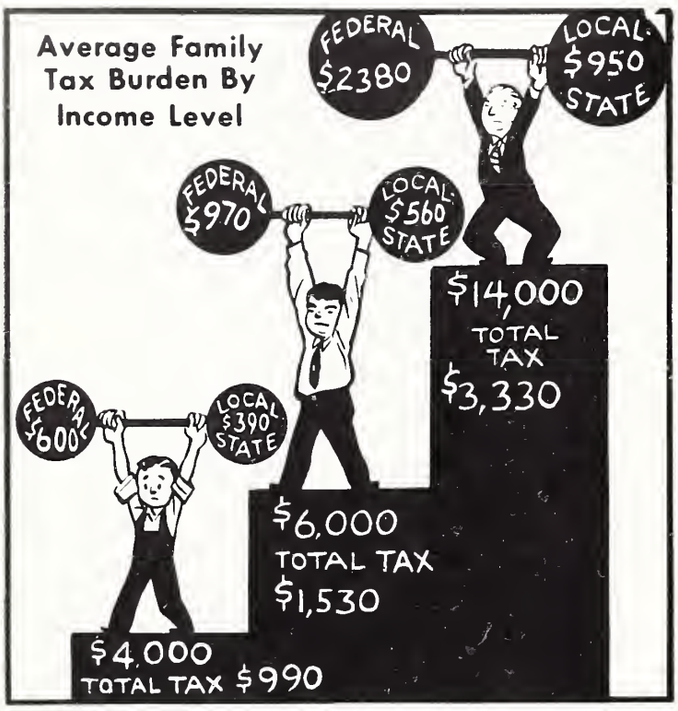
—If he clamors constantly for medical investigation and recognition.

—If he claims medical men are persecuting him or are afraid of his competition.

—If he tells you that surgery, x-rays, or drugs will cause more harm than good.

Taxes Take $1 Out of $4 From Average U. S. Family

Taxes now take $1 out of every $4 of income in the great majority of American families, according to Tax Foundation, Inc.



Federal, state and local taxes combine to tax most American families at about the same effective rate—25 per cent of income, says Tax Foundation, Inc.

More than four out of five U. S. families have annual incomes between $2,000 and $15,000 says the Foundation, and pay about 70 per cent of the nation's total tax bill. They are taxed at just about the same rate, approximately 25 per cent of their annual incomes. Hidden and direct taxes are included in this estimate of the tax "bite." Thus, as shown in the preceding table, the average tax load on a family with total income of $6,000 in 1958 was $1,530, made up of $970 federal, and $560 state and local taxes.

AVERAGE TAX BURDEN PER FAMILY
BY LEVEL OF INCOME
1960

Total Income[b]	*Average Tax Burden Per Family*[a] TOTAL	FEDERAL	STATE AND LOCAL
$ 1,500	$ 410	$ 230	$ 180
4,000	990	600	390
6,000	1,530	970	560
8,000	2,100	1,410	690
10,000	2,450	1,650	800
14,000	3,330	2,380	950
32,000	11,580	9,620	1,960

[a] Includes social insurance.
[b] Approximate average total income for income classes used in Tax Foundation's study Allocation of the Tax Burden by Income Class, May, 1960. "Total income" includes various forms of income, such as undistributed corporate profits, which, while not actually received by individuals, are assumed to accrue to individuals.

Cost of Living Rises 1.5 Per Cent in 1960

If you wanted to buy a new suit last year—and never quite found the money for it—the reason may be that the cost of living in the U. S. rose 1.5 per cent in 1960.

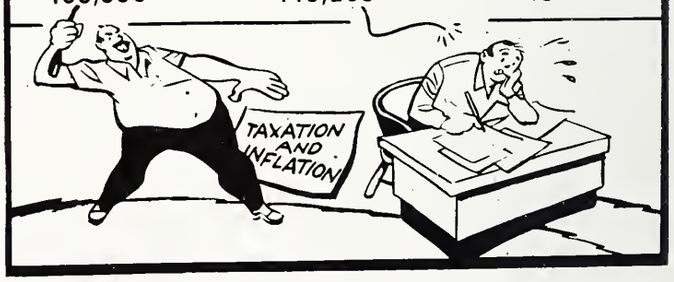
That's another way of saying each dollar you earned last year was worth about 1½ cents less than your 1959 dollar. Deducting that inflationary nibble from each dollar of a $6,000 income adds up to a $91 bite.

You can't deduct that loss from your federal income tax. If you were lucky enough to get a "cost of living" pay raise, you even were taxed on your "increased" income.

That partly explains, says Tax Foundation, how the federal government has been able to more than double its receipts from the personal income tax

What Is Your Real Income ?

Married Couple With Two Children		
If Your 1946 Income Was-	In 1961 You Must Earn-	-OR- Just To Stay Even - An Increase Of-
$ 2,000	$ 3,140	57%
3,000	4,756	59
5,000	7,844	57
7,500	11,659	55
10,000	15,461	55
20,000	30,104	51
50,000	73,482	47
100,000	145,285	45



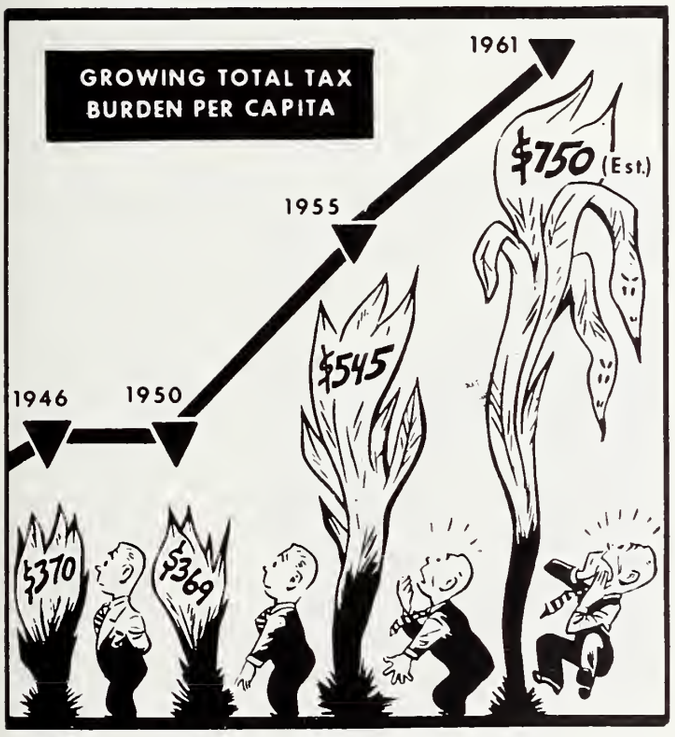
The effects of inflation and taxes charted above show how much more must be earned in 1961 for an American to be as well off as at the end of World War II.

without significantly raising the rates (or lowering them either) since World War II. The cost of living, which has continued to go up right on through four business recessions since the war, has dogged the heels of rising incomes. At the same time our "creeping inflation" has enabled the federal government to take a much larger share of your income than it used to.

The average U. S. production worker has had his pay increased from $44 a week ($2,279 a year) in 1946 to $91 a week ($4,727 a year) by 1960. That looks as if he is about 100 per cent better off than 15 years ago. But prices of the goods and services he buys have increased enough to wipe out half the gain. And take a look at what those pay increases have done to his taxes. In 1946 his federal income tax for the year was $10. In 1960 that tax alone cost him $371—about 37 times as much.

Budget Burden Varies From State to State

The burden of the 1962 federal budget ($82.3 billion) varies tremendously from state to state. For example, according to a formula developed by Tax Foundation, Inc., the residents of Wisconsin will each bear $431 of the federal burden. A resident of Minnesota will bear a burden of $43 less, or $388. The figures:



Our population is growing, but the cost of government in the United States is growing even faster. Tax Foundation estimates one person's share of the total tax burden in 1961 will be more than twice his 1946 share.

ESTIMATED BURDEN OF FEDERAL BUDGET RECEIPTS FOR FISCAL YEAR 1962

State	*Amount (Millions)*	*Per Capita*	*State*	*Amount (Millions)*	*Per Capita*
TOTAL	$82,333	$ 459	Mont.	231	342
Ala.	807	247	Neb.	519	368
Alas.	91	403	Nev.	173	607
Ariz.	469	360	N. H.	272	448
Ark.	387	217	N. J.	3,581	590
Calif.	9,024	574	N. Mex.	305	321
Col.	774	441	N. Y.	11,263	671
Conn.	1,787	705	N. C.	1,136	249
Del.	461	1,034	N. Dak.	156	247
Fla.	2,067	417	Ohio	4,759	490
Geo.	1,095	278	Okla.	766	329
Hawaii	247	390	Ore.	782	442
Ida.	222	333	Pa.	5,722	506
Ill.	5,903	586	R. I.	436	508
Ind.	1,877	403	S. C.	502	211
Ia.	980	355	S. Dak.	165	242
Kan.	790	363	Tenn.	980	275
Ky.	864	284	Tex.	3,565	372
La.	980	301	Ut.	296	322
Maine	354	365	Vt.	140	359
Md.	1,581	510	Va.	1,400	353
Mass.	2,857	555	Wash.	1,342	470
Mich.	3,680	470	W. Va.	560	301
Minn.	1,326	388	Wis.	1,704	431
Miss.	370	170	Wyo.	132	400
Mo.	1,885	436	D. C.	568	743

Where Does Your Money Go?

The Budget Bureau offers the following table to enable you to calculate just how much of your income tax goes for defense, agriculture, and other government expenditures. For lazy people, Tax Foundation, Inc. has added the figures showing the breakdown of a $5,000-a-year income for a married man with two children.

Budget Bureau Calculator		*Tax Foundation Calculation*
Total income tax paid:		$420
Excise, corporation and other U. S. taxes paid directly or indirectly average 82% of income tax; 82% of above figure is:		$344
Total tax paid (add above)		$764
Portion of tax that goes for:		
Major National Security	(57%)	$435
Interest	(11%)	84
Veterans	(6%)	46
Agriculture	(6%)	46
Labor, Welfare	(6%)	46
Commerce, Housing, Space Technology	(4%)	31
International	(3%)	23
Natural Resources	(3%)	23
General Government	(2%)	15
Debt Retirement	(2%)	15

AUXILIARY

President Comments On 1961 Annual Session

By MRS. LEE R. REID
Jackson, Mississippi

It is getting close to convention time, and I do hope each one of you is making her plans to attend. Remember the dates, May 9, 10, and 11. You young mothers, invite grandmother to come and enjoy her grandchildren, so that you and your busy doctor can have a few days of fun, rest, and change. We have a wonderful program and please check this issue of JOURNAL MSMA for announcements.

We will have our General Session on Tuesday, and we certainly are looking forward to our luncheon at noon. Wednesday morning the Gulfport Unit of the Coast Counties Auxiliary is having "Coffee in the Garden" at the lovely home of Dr. and Mrs. M. M. Snelling. Then we will have a free afternoon to enjoy the Gulf Coast. We will have registration on three days, for it is very important to our Medical Association. Please do not forget to register.

We will have two guests, one from the AMA Auxiliary and one from the Southern Medical Association Auxiliary. They will speak to us during our general session and luncheon. We are also invited to MSMA's banquet on Wednesday evening.

It will be nice to greet old friends and to make new ones. After all, "New friends well met, are what we make old friends out of." I have a very personal reason for wanting you to come to this convention. I have met so many of you during the past two years, and I have enjoyed knowing each and every one of you. Since I won't be visiting your county auxiliaries any more, this convention will be the last opportunity I shall have to see most of you for a long time. My how I am going to miss you. Please come.

Mrs. Douglass to Attend 1961 Meeting

Mrs. Roy A. Douglass of Huntingdon, Tenn., president-elect of the Woman's Auxiliary to the Southern Medical Association, will be an honored guest at the Mississippi State Medical Auxiliary Convention in Biloxi, May 9 and 10. A past president of the Tennessee State Medical Auxiliary, Mrs. Douglass has held the offices of councilor, second vice-president, and first vice-president in the Southern Medical Auxiliary. She is past bulletin chairman, southern region, in the Woman's Auxiliary to the American Medical Association, and at present is an area chairman for the AMA legislation committee.



Mrs. Douglass

Mrs. Douglass, a native of Nashville, Tenn., received a B.S. degree from Vanderbilt University. She has lived in Huntingdon since her marriage to Dr. Douglass in 1919.

She has two children, Jean Markham of Tiptonville, Tenn., and Dr. Roy Douglass, Jr., an obstetrician of Jackson, Tenn., and eight grandchildren.

Mrs. Reid Addresses Coast Counties Auxiliary

By MRS. PRESLEY E. WERLEIN
Biloxi, Mississippi

Mrs. Lee R. Reid, president of the Mississippi State Medical Auxiliary, was the guest of the Coast Counties Medical Auxiliary at a luncheon on Feb. 22.

Mrs. M. M. Snelling, president of the hostess Gulfport unit, presided at the luncheon. She welcomed the guests present and introduced those seated at the speakers' table including Mrs. Reid, Mrs. J. R. Foster, president of the Biloxi unit; Mrs. L. O. Stewart, president of the Jackson county unit; Mrs. E. A. Trudeau, Biloxi, councilor for the district; Mrs. James T. Thompson, Moss Point, and Mrs. Eldon Bolton, Biloxi, co-chairmen for the state convention, and Mrs. Reid's guest, Mrs. F. E. McCullough of Jackson.

Following the luncheon, Mrs. Reid spoke to the group on the subject "Legislation" with reference to old age assistance and medical care.

Mrs. Durant Dabbs was chairman of the luncheon committee assisted by Mrs. Robert Mitchell, Mrs. E. T. Riemann, Jr., and Mrs. James Deen, all of Gulfport. Fifty-eight members of the Coast Counties Auxiliary were present at the luncheon.

Co-Chairmen Complete Annual Session Plans

By MRS. PRESLEY E. WERLEIN
Biloxi, Mississippi

Mrs. James T. Thompson, Moss Point, general chairman of the Mississippi State Medical Auxiliary Convention, and her co-chairman, Mrs. Eldon Bolton, Biloxi, have completed plans for entertainment, program, and committees for the meeting to be held at Biloxi on May 9 and 10.

Committee chairmen for the meeting are Mrs. Presley E. Werlein, Biloxi, publicity; Mrs. E. A. Trudeau, Biloxi, registration; Mrs. Karl Horn, Moss Point, luncheon; Mrs. Robert Mitchell, Gulfport, decorations, and Mrs. John Spriggs, Biloxi, transportation.

Convention headquarters will be the Hotel Buena Vista. The pre-convention board meeting will be held Monday, May 8, at 4:30 p.m.

On Tuesday, May 9, Mrs. Lee R. Reid, state president, will entertain at a continental breakfast for auxiliary members from 7:30-8:30 a.m. before the general session at 8:30. Luncheon will be in the Lotus Room of the Buena Vista, followed by the afternoon business session.

Wednesday morning the Gulfport unit will entertain at a coffee party in the garden of Dr. and Mrs. M. M. Snelling at 4803 Kendall Avenue in Bayou View, Gulfport.



Mrs. Eldon Bolton, standing, and Mrs. James T. Thompson, seated, pause during a planning session for the 1961 Mississippi State Medical Auxiliary Convention. Mrs. Thompson is chairman and Mrs. Bolton co-chairman of the meeting.

Mrs. Puckett Heads Hattiesburg Unit

Mrs. T. F. Puckett was named president of the Hattiesburg Unit of the South Mississippi Medical Auxiliary at a recent meeting.

Other officers are Mrs. Dan Reikes, president-elect; Mrs. Gerald Gable, vice president; Mrs. George Herring, secretary, and Mrs. Harry Fridge, treasurer.

Today's Health Denounces Medical Mail-Order Quacks

Medical mail-order quacks were termed the "meanest sharpies in the world" in an exposé in the March *Today's Health Magazine,* published by the American Medical Association.

"Peddling useless drugs, fake 'remedies,' and bizarre therapeutic gadgets via the U. S. Mails is a lucrative source of income for some of the meanest sharpies in the world," the article said. "These human vultures feed on the ignorance and hopes of men and women who yearn for the 'miracles' that legitimate medicine thus far has been unable to provide."

The U. S. Postal Inspection Service was credited with preventing mail-order quackery from becoming possibly the greatest swindle of all time.

However, last year the American public was bilked out of $50 million by mail-order frauds.

"For the most part," said the essay, "medical mail-order frauds operate on two related theories: Some people will pay anything for a promised 'miracle,' and a certain percentage of suckers can be found on almost any mailing list.

Avoiding mail frauds can be a simple matter of regarding any therapy, device, treatment, remedy, or cure sold by mail with suspicion, especially if it makes sweeping claims, the article said.

"In any case, your best protection is your own doctor," it said. "If you think it's something he may not have heard about, he can look into it a lot quicker and more reliably than you can."

PERSONALS

CURTIS P. ARTZ and JAMES D. HARDY of the University of Mississippi School of Medicine spoke before the American College of Surgeons March 6-9 in Philadelphia, Pa. Dr. Artz presented a paper on the management of burns and Dr. Hardy conducted a panel discussion on "Parenteral Support With Emphasis on Postoperative Oliguria and Nutrition." In addition he delivered a talk to the general surgery session on "Peritonitis—Some Causes and Management."

C. D. BOUCHILLON has been appointed chief radiologist at the Jones County Community Hospital. He succeeded the late Dr. Glenwood L. Cook. At the time of his appointment, Dr. Bouchillon was associated with St. Dominic's Hospital in Jackson.

WALTER CRAWFORD of Tylertown has been elected chairman of a newly organized community development association in Walthall County. The committee has set up a five point program aimed at developing agricultural and industrial employment for men, increasing farm income, properly utilizing county farm land, and development of a training program for vocational and industrial arts.

HOMER ELLIS was recently re-elected president of the Centreville Chamber of Commerce. R. J. FIELD was renamed first vice president.

LEONARD FABIAN of the University of Mississippi School of Medicine has been elected to membership in the Society of University Anesthesiologists.

RUTH HAGSTROM has terminated her duties as health officer for Clay, Oktibbeha, and Webster Counties. She will work on a research fellowship at Vanderbilt Hospital.

JAMES HARDY has assumed the presidency of the Society of University Surgeons.

ROBERT P. HENDERSON of Jackson has been named chairman of the Southern Radiological Conference. Dr. Henderson, radiologist at the Mississippi Baptist Hospital, took office at the close of the group's three-day conference held recently at Clear Point, Ala., with delegates in attendance from Alabama, Mississippi, Tennessee, Florida, and Louisiana.

WILLIAM A. LONG, JR., who has practiced medicine in Gulfport for more than two years, has moved to Denver, Colo. He will continue his practice and pursue further study at Colorado General Hospital, where he interned several years ago.

H. C. RICKS, JR., has been named president of the Family Service Association of Jackson.

M. C. SAPPINGTON, formerly of Houston, has announced the opening of his office for practice of general medicine in Tupelo.

W. C. WINANS of Enterprise and WILLIAM RIECKEN of Koscuisko represented Mississippi at a national Civil Defense meeting in Las Vegas, Nev., called by the U. S. Department of Health, Education, and Welfare. Dr. Winans and Riecken were appointed by Dr. A. L. Gray, state health officer.

Is 75 the Limit Life Expectancy?

Spectrum, monthly medical publication put out by Pfizer Laboratories, reports that the average life expectancy will reach 75 years by the end of the century (it's now 69.7 years) but won't go much beyond that. Reasons: 1. There's no way of preventing the proclivity in later life to disease. 2. The big trend in medicine now is toward prevention of pain rather than prolongation of life. 3. There is no way of controlling diets nationally. A high percentage of the U. S. population has high blood pressure arising from a mismanaged diet. 4. The stress factor, which is blamed for much heart disease, can't be remedied by merely advising the patient to "rest and relax."



"She wants a two-o'clock appointment? Okay . . . ask her what time she'll be here!"

JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION
May, 1961, Vol. II, No. 5

ORIGINAL PAPERS

Electron Microscopic Examination Of Renal Biopsies

R. B. ARHELGER, M.D., J. M. MONTALVO, M.D.,
J. R. CAVETT, M.D., and J. G. BRUNSON, M.D.
Jackson, Mississippi

Electron microscopy of renal biopsies has resulted in the gradual transition of the electron microscope into a diagnostic as well as a research instrument. Approximately 40 renal biopsies have been obtained for electron microscopy at the University of Mississippi School of Medicine. Biopsies were obtained from patients with the nephrotic syndrome, scleroderma, lupus erythematosus, or hypertension. This paper describes the morphologic changes observed in kidney specimens from three of these patients and briefly discusses the possible significance of these changes.

NUMEROUS INVESTIGATORS have examined renal biopsies by electron microscopy. These studies have resulted in the acquisition of considerable information regarding the pathogenesis of certain renal diseases and the gradual transition of the electron microscope into a diagnostic as well as a research instrument.

Approximately 40 renal biopsies have been obtained at the University of Mississippi School of Medicine since the installation of an electron microscope in May 1960. A majority of the biopsies were obtained from patients with obvious kidney disease, but in whom a specific diagnosis could not be established by routine methods. The biopsies were performed in an attempt to aid in prognosis and treatment of each patient and to gain further information regarding the pathogenesis of renal diseases.

Biopsy specimens were obtained from patients with the nephrotic syndrome, scleroderma, lupus erythematosus, or hypertension. This paper describes the morphologic changes observed in specimens from three patients with kidney disease of unknown etiology.

From the Departments of Pathology, Pediatrics, and Medicine, University of Mississippi School of Medicine.

Percutaneous kidney biopsy specimens were obtained by use of the Franklin modification of the Vim-Silverman needle according to the technique described by Muehrcke *et al.*[1] Biopsies were considered adequate for evaluation if a total of 10 or more glomeruli and associated tubules were obtained. Studies by Muehrcke *et al.*[2] and Vernier *et al.*[3] have shown interpretations of numerous postmortem needle biopsies to be in agreement with the interpretations of the routine autopsy sections prepared from the same kidneys.

Portions of each biopsy were fixed in neutral formalin, dehydrated, embedded, and sectioned in the usual manner for light microscopy. Sections were stained with hematoxylin and eosin, and by the periodic acid-Schiff method.

Other portions of the specimen were cut into 1 mm. cubes, fixed in 1 per cent buffered osmic acid,[4] dehydrated in graded alcohols, embedded in methacrylate, and sectioned on a Servall, Porter-Blum microtome for electron microscopy. Sections 200-500 Angstroms in thickness were mounted on 2 mm. copper specimen grids and examined in an RCA, EMU-3F, electron microscope. Serial sections cut at one or two microns were mounted on glass slides and stained by the Wright-Giemsa method and, in some cases, by a modification of the periodic acid-Schiff method.[5] It was therefore possible to study the same glomeruli by both light and electron microscopy.

CASE REPORT 1

A 17-year-old white male developed generalized edema and gross hematuria in early January 1960. Past history was noncontributory, save that patient

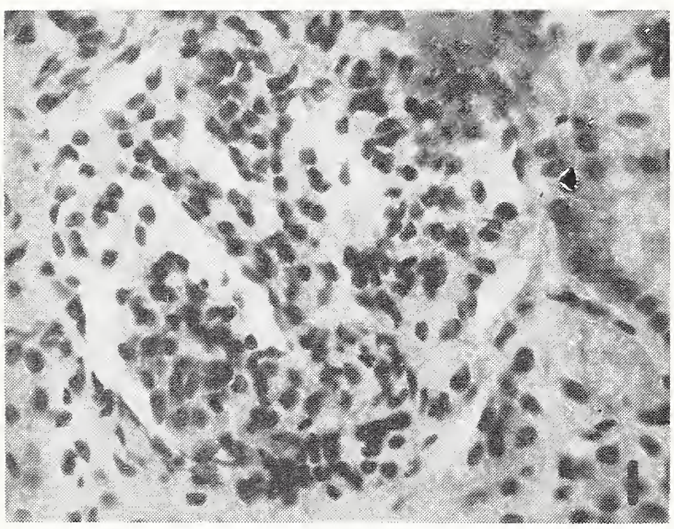


Figure 1. Glomerulus from Case 1 which shows hypercellularity typical of acute glomerulonephritis. Hematoxylin and eosin, × 360.

thought he might have had slight periorbital edema during the summer of 1960. He was admitted to the University of Mississippi Medical Center on Jan. 26, 1960, at which time he was afebrile and his blood pressure was 130/90/70. Generalized edema and a definite abdominal fluid wave were present. Laboratory findings: 4+ albuminuria, cholesterol 480 mg. per cent, total serum protein 4.2 gm. per cent with 1.9 gm. per cent albumin and 2.3 gm. per cent globulin, hematocrit 52 per cent, white blood count 6,500 with a normal differential. Repeated urinalyses showed albuminuria, slight microscopic hematuria, and finely and coarsely granular casts. Other diagnostic studies were negative or within normal limits.

A clinical diagnosis of nephrotic syndrome was made. The patient failed to respond to a low salt, high protein diet, and diuretics, and was started on

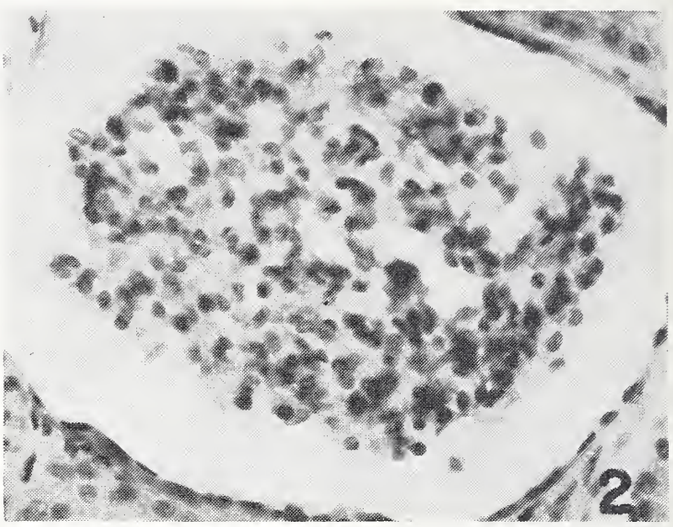


Figure 2. Glomerulus from Case 1, stained by periodic acid-Schiff method, which shows marked hypercellularity and ischemia. × 360.

prednisolone 100 mg. per day on Feb. 5. From Feb. 13 to Feb. 21 he lost 40 pounds in weight and prednisolone dosage was reduced to 100 mg. three days per week.

No glomeruli were present in a renal biopsy obtained March 2. A repeat biopsy March 10 was interpreted as late, subsiding acute glomerulonephritis (Fig. 1). No sections of this specimen were taken for electron microscopy.

The patient was discharged on March 12 on a low salt diet, supplementary potassium, and prednisolone 100 mg. three days per week. On June 6, 1960, he began to notice an increase in weight and periorbital edema. He was readmitted on June 15 with generalized peripheral edema and a blood pressure of 134/100.

Laboratory findings were 4+ albuminuria, nonprotein nitrogen 60 mg. per cent, cholesterol 840 mg. per cent, total serum protein 3.8 gm. per cent with 1.5 gm. per cent albumin and 2.3 gm. per cent globulin. Renal biopsy on June 24 was interpreted as subsiding, acute glomerulonephritis with occasional glomerular adhesions and moderately severe tubular degeneration (Fig. 2). A portion of the specimen was taken for electron microscopy.

From June 25, 1960, to Aug. 19, 1960, the patient was given two courses of spironolactone, in combination with benzydroflumethiazide or chlorothiazide. These agents in addition to ACTH, which was given between the courses, failed to result in a diuresis. He was continued on ACTH from Aug. 19 to Aug. 25 and, beginning Aug. 27 he lost 30 pounds within a few days. The patient was discharged Sept.

6, 1960, on prednisolone 60 mg. three times a day, three days per week, along with a low salt, high protein diet and supplementary potassium.

Since his discharge he has been followed in the clinic and on Nov. 16, 1960, he again had 4+ albuminuria. On Dec. 21, 1960, he showed generalized peripheral edema.

CASE REPORT 2

A 6-year-old Negro boy was hospitalized elsewhere for approximately four months following development of generalized edema and ascites in January 1960. He was admitted to the University Medical Center for the first time on June 13, 1960. During the three week period following his first hospitalization, he had developed progressive respiratory distress and edema, and his father stated the patient had had a fever for approximately two weeks. Past history and family history were noncontributory. Temperature was 100°, blood pressure 126/86.

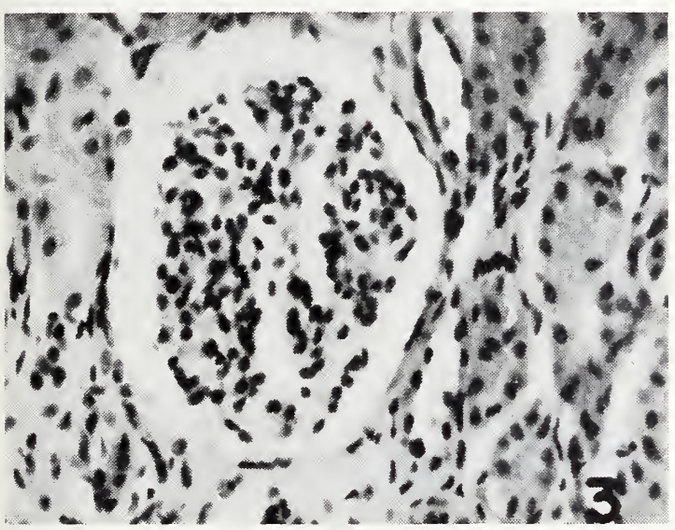


Figure 3. Essentially normal glomerulus from Case 2. Hematoxylin and eosin, × 360.

There was marked anasarca and café-au-lait spots were present over his back and abdomen.

Laboratory findings were 4+ albuminuria, microscopic hematuria, hematocrit 24 per cent, white blood count 21,350, with 80 polymorphonuclears, 5 bands, 1 monocyte, and 14 lymphocytes, nonprotein nitrogen 53 mg. per cent, cholesterol 505 mg. per cent, total protein 4.4 gm. per cent with 1.7 gm. per cent albumin and 2.7 gm. per cent globulin. A urine culture showed a heavy growth of Proteus.

The patient was digitalized, started on antibiotics, and given a low salt, high protein diet. On June 20 prednisolone 10 mg. every 8 hours and supplementary potassium were begun. By June 28 there was a 13 pound weight loss and the patient appeared improved. Digoxin was discontinued and the steroid dose was changed to 10 mg. every 8 hours three days per week. In late July, 2+ albuminuria again was present along with a weight gain of approximately 10 pounds. He was given continuous steroid therapy, but developed hypertension and Cushinoid features. The prednisolone dose was decreased until August when continuous steroid therapy was initiated again.

A percutaneous renal biopsy obtained August 30 was interpreted as showing no significant morphologic changes (Fig. 3). Tissue was taken for electron microscopic examination. On August 31 steroid therapy was discontinued. The patient continued to have 3+ albuminuria and had regained his admission weight. He was discharged on Sept. 13, 1960, with no medication and has been followed in the Pediatric Clinic. He continues to feel well, but albuminuria and edema persists.

CASE REPORT 3

A 6-year-old white girl was seen by a physician in November 1959 because of enuresis of approximately seven months duration. Urinalysis showed slight albuminuria and microscopic hematuria, and she was given penicillin. The enuresis continued and the referring physician stated she had an elevated blood urea nitrogen. She was seen for the first time at the University Medical Center on March 17, 1960. Past history revealed occasional slight periorbital edema in the early morning. She was noted to be a well-developed, well-nourished girl in no acute distress with blood pressure 100/60 and temperature 99.9°. Urinalysis showed 1+ albuminuria and microscopic hematuria. Nonprotein nitrogen was 38 mg. per cent, cholesterol 250 mg. per cent, total protein 7.7 gm. per cent with 5.4 gm. per cent albumin and 2.3 gm. per cent globulin. She was hospitalized on April 12 for further work-up. This failed to reveal the etiology of her urinary findings. Following discharge on April 23 she remained asymptomatic, but albuminuria and hematuria persisted.

She was readmitted on Sept. 27, 1960. Creatinine clearance was within normal limits. On October 4 a percutaneous needle biopsy of the left kidney was obtained under general anesthesia. Diffuse glomerular

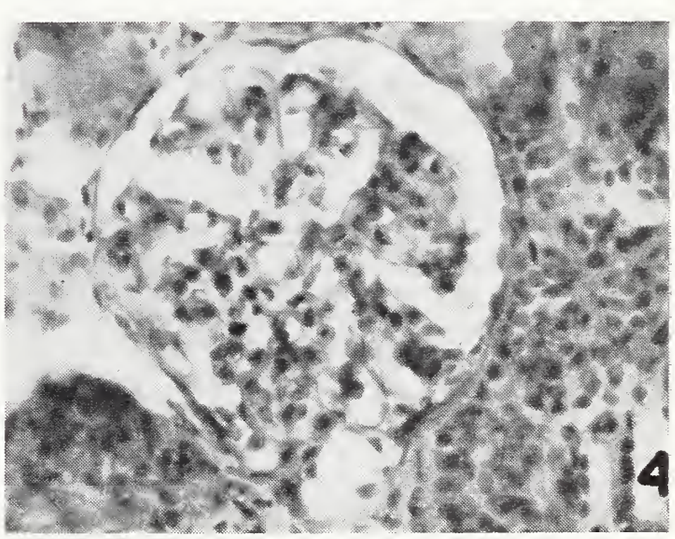


Figure 4. Periodic acid-Schiff stain of glomerulus from Case 3, which demonstrates diffuse capillary basement membrane thickening. × 360.

capillary basement membrane thickening was observed by light microscopy (Fig. 4). A portion of the specimen was taken for electron microscopy. The patient was discharged on October 5. Prednisolone 40 mg., three days per week was begun on October 21, 1960. It is planned to continue this therapy for approximately six months and then rebiopsy the patient.

ELECTRON MICROSCOPIC OBSERVATIONS

Normal Renal Glomerulus: It is generally agreed that the glomerular capillary has three distinct components—the endothelium, the basement membrane, and the epithelium (Fig. 5). The endothelial cells are adjacent to the capillary lumen and are normally more numerous than epithelial cells. Endothelial nuclei are somewhat smaller and more dense than epithelial nuclei. The endothelial cytoplasm is attenuated away from the cell body to form a thin layer covering the inner wall of the basement membrane. Numerous tiny interruptions are present in this layer of endothelial cytoplasm which are thought by most investigators to represent "pores."

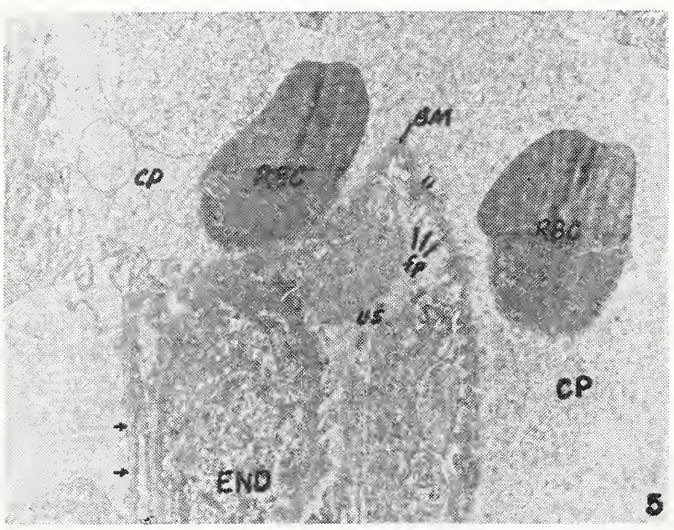


Figure 5. Normal glomerular capillary structure. Epithelial cytoplasm is shown in the lower central portion of the field with the foot processes inserting on the adjacent basement membranes. The epithelial foot processes show increased density adjacent to the basement membrane. An endothelial cell fills the lumen of the capillary in the lower left center. Thin attenuated endothelial cytoplasm lines the inside of the capillaries. Numerous endothelial "pores" are shown (arrows). The dense central zone and lighter peripheral zones of basement membrane are seen clearly in several areas. × 13,000. Abbreviations for electron micrographs are as follows: END, endothelium; BM, basement membrane; EP, epithelium; RBC, red blood cell; CP, capillary lumen; fp, foot process; US, urinary space; VAC, vacuole. (Electron micrograph reduced from actual size 51½ per cent.)

The basement membrane proper normally varies in thickness from approximately 0.15 microns to 0.20 microns and is a relatively homogenous layer separated from the endothelium on the inner side and the epithelium on the outer side by thin, less dense zones thought to represent areas of cement substance[6] or integral parts of the basement membrane.[7]

The epithelial cytoplasm branches into a number of thin processes which in turn form broader "foot processes" which insert upon the outer aspect of the basement membrane proper. The area of each foot process in contact with basement membrane is considerably more dense than the remaining epithelial cytoplasm.

Case 1: Six glomeruli were examined by electron microscopy. A consistent abnormality of the epithelial cell was present in all sections examined. This abnormality consisted of loss of the foot processes, resulting in smudging of epithelial cytoplasm along the basement membrane (Fig. 6). In addition, large cytoplasmic vacuoles were observed in a majority of the epithelial cells (Fig. 7). There was diffuse, moderate basement membrane thickening in most glomeruli and the endothelial cytoplasm appeared swollen (Fig. 6). There was

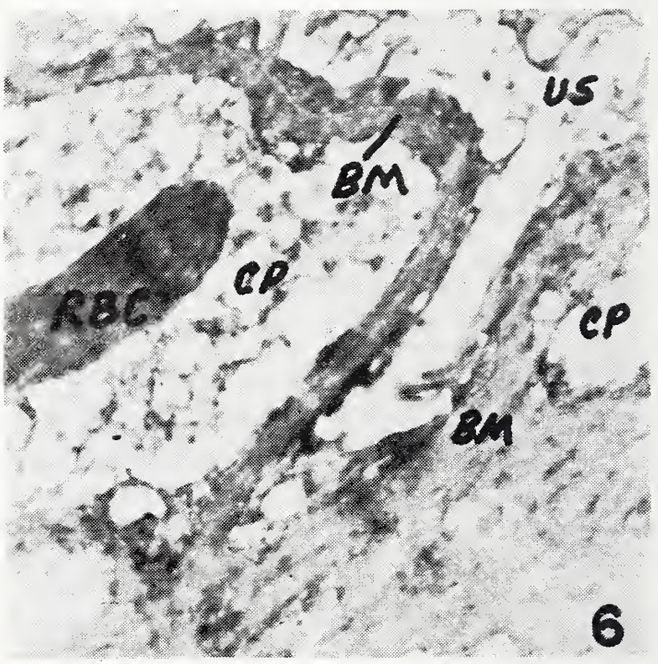


Figure 6. A capillary from Case 1 containing a red blood cell is present to the left of the micrograph. The lining endothelium appears normal and the basement membrane is slightly thickened throughout. Note the absence of epithelial foot processes with the dense epithelial cytoplasm extending along the outer surface of the basement membrane as a continuous layer. × 16,500.

no apparent endothelial cell proliferation in any of the glomeruli examined. One glomerulus showed marked basement membrane thickening with accumulations of basement material interlaced with endothelial cytoplasm (Fig. 8). This apparently newly formed basement membrane material resulted in complete obliteration of the capillary lumina.

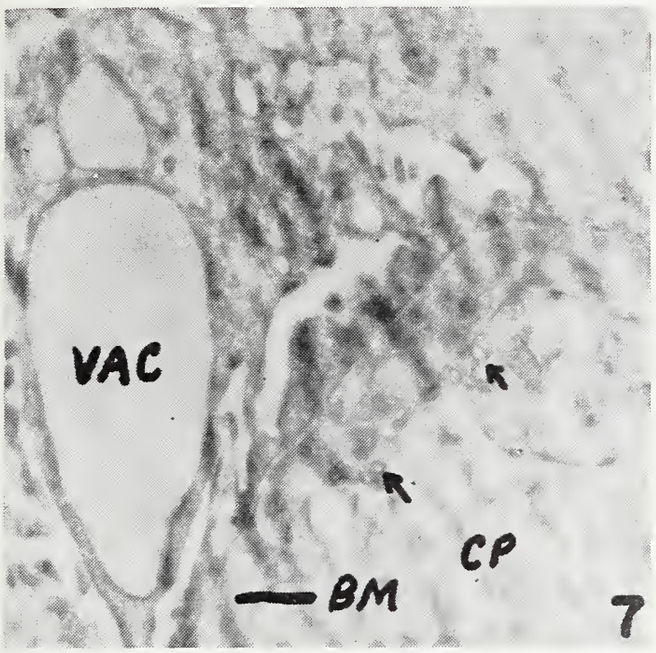


Figure 7. Section of a glomerular capillary from Case 1 showing a large vacuole in epithelial cytoplasm. Note the smudged epithelial foot processes, slightly thickened basement membrane, and several vesicles within the endothelial cytoplasm (arrows). × 21,250.

Case 2: Epithelial foot process smudging was apparent in several areas, while in some capillary loops the foot processes retained their normal structure (Figs. 9 & 10). There was an increase in number of epithelial cytoplasmic vacuoles. Diffuse basement membrane thickening was present in all glomeruli examined. In several areas massive accumulations of basement membrane material, in combination with endothelial cell proliferation, resulted in complete occlusion of capillary lumina (Fig. 10).

Case 3: Five glomeruli were examined by electron microscopy. The most striking abnormality was a diffuse thickening of the basement membrane proper. In most areas the epithelial foot processes appeared normal, although in a few scattered areas smudging was observed. Numerous vacuoles were present within the epithelial cytoplasm and occasionally within the endothelial cytoplasm. A few glomeruli showed marked, nodular basement membrane thickening with basement membrane material encroaching on capillary lumina (Figs. 11 & 12). The endothelial cytoplasm appeared somewhat swollen in several areas, but there was no evidence of endothelial cell proliferation.

DISCUSSION

Smudging of the epithelial foot processes is the principal glomerular abnormality observed in the nephrotic syndrome, regardless of etiology. In so-called "pure or lipoid nephrosis" of childhood, morphologic changes are often not visible by light microscopy. Loss of foot process structure is a consistent finding in these cases and is thought to represent an attempt by the kidney to halt abnormal protein filtration. Vernier[8] observed smudged foot processes in glomeruli from dogs given large amounts of intravenous albumin to produce albuminuria. After discontinuing the albumin infusion, the foot process structure returned to normal. Electron microscopy of renal biopsy specimens from children with the nephrotic syndrome in clinical remission has shown normal foot process structure. These observations suggest this abnormality to be reversible and possibly indicate a good prognosis for patients in whom foot process smudging is the only morphologic change.

It is possible that the primary lesion of the nephrotic syndrome is in the basement membrane

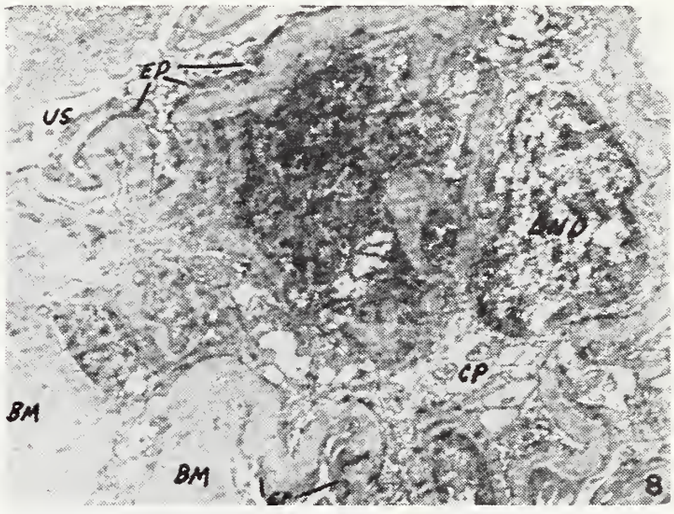


Figure 8. Case 1. Two endothelial nuclei are present. There is marked basement membrane thickening with newly formed basement membrane material extending into and around the endothelial cytoplasm resulting in almost complete occlusion of the capillary lumen. Note almost total absence of foot processes. × 13,000. (Electron micrograph reduced from actual size by 51½ per cent.)

and has not yet been defined. Spiro[9] described small areas of lesser density within the basement membrane which he considers possibly to represent a more definitive lesion. These areas might

represent areas of protein transport and conceivably could be associated in some way with the large epithelial cytoplasmic vacuoles and numerous endothelial cytoplasmic vesicles seen in the nephrotic syndrome. However, his observation has not been substantiated by other investigators.

Bell[10] described thickened "basement membranes" as the characteristic glomerular lesion of the nephrotic syndrome by light microscopy. This thickening probably represents varied degrees of foot process flattening, basement membrane thickening, and broadening of the endothelial cytoplasm. Electron microscopic studies have revealed thickening of the basement membrane proper along with accumulation of masses of basement membrane material in cases of nephrotic syndrome which did not respond well to therapy. Endothelial cell proliferation is sometimes associated with these changes. Basement membrane thickening, either diffuse and/or in masses, and endothelial proliferation are considered to represent complications of the nephrotic syndrome. Their presence indicates a more severe form of the disease. Therefore, it is apparent that electron microscopy is of considerable importance in determining which component or components of the glomerular capillary are involved as an indication of the severity of the disease.

Loss of epithelial foot process structure and severe basement membrane changes were present in both Case 1 and Case 2 reported in this paper. Case 2 also showed areas of endothelial cell proliferation. In each case, the long-term clinical response to therapy has been poor and it would appear, from the electron microscopic findings, that these two patients with the nephrotic syndrome will progress to the characteristic morphologic picture of chronic glomerulonephritis. Case 1 was interpreted by light microscopy as showing glomerular cellular proliferation of a degree consistent with subsiding acute glomerulonephritis. It is of interest to note that there was no evidence of either epithelial or endothelial proliferation by electron microscopy. This discrepancy may be explained on the basis of endothelial cell swelling observed by electron microscopy, or it may represent simply a thick light microscope section, which gave the impression of hypercellularity. Light microscopy of Case 2 was interpreted as showing no significant changes. However, electron microscopy revealed scattered epithelial cell foot process smudging, marked basement membrane changes, and areas of endothelial cell proliferation.

Light microscopy of Case 3 showed definite diffuse basement membrane thickening. This observation was substantiated by electron microscopy which also revealed areas of nodular basement membrane thickening and scattered areas of foot process smudging. The lack of diffuse foot process involvement indicates that this is not a typical case of the nephrotic syndrome, at least at this stage. The main abnormality is thickening of

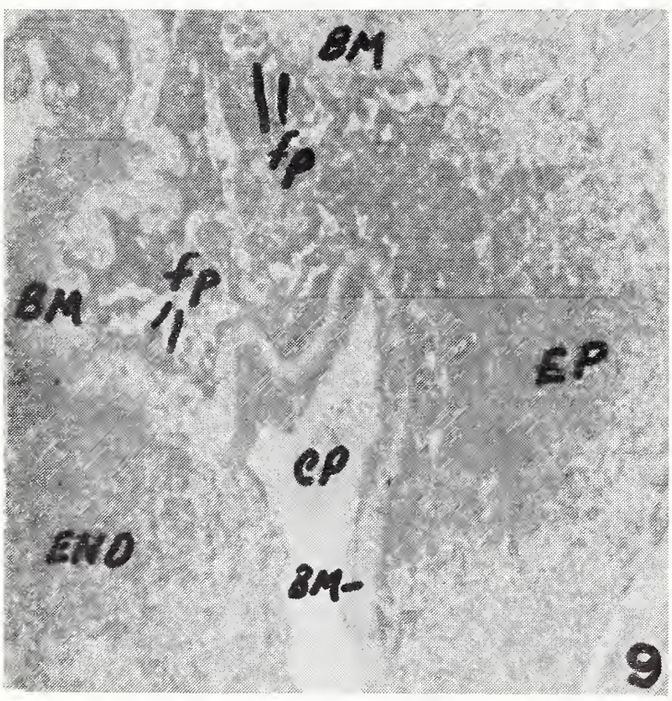


Figure 9. Case 2. Note diffuse and nodular basement membrane thickening. In some areas the foot processes appear normal, while in others they are smudged. × 10,000.

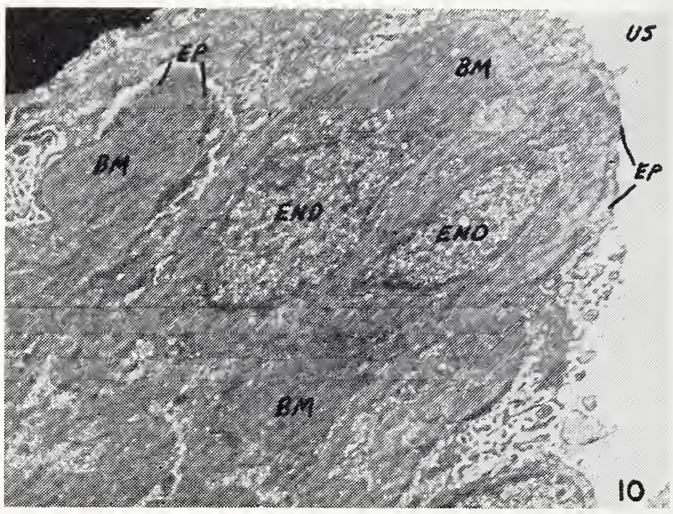


Figure 10. Case 2. Endothelial proliferation is shown, along with marked basement membrane thickening and formation of new basement membrane material resulting in complete capillary occlusion. There is complete absence of epithelial foot process structure. × 7,500. (Electron micrograph reduced from actual size by 51½ per cent.)

the basement membrane proper, and it is possible that the lesion may progress to the diffuse glomerular hyalinization of chronic glomerulonephritis without responding to therapy.

SUMMARY

The nephrotic syndrome is known to occur with several diseases, such as amyloidosis, diabetes mellitus, lupus erythematosus, and glomerulonephritis. It may also develop as a consequence of renal vein thrombosis, drug toxicity, bee stings, or poison oak dermatitis. However, a majority of cases in children are unrelated to other systemic illnesses and develop in the absence of known toxic agents.

Electron microscopic studies of renal biopsies from patients with the nephrotic syndrome have shown a wide variation of morphologic changes in the glomeruli. These changes include loss of epithelial foot process structure, varying degrees of basement membrane thickening, formation of apparently new basement membrane material within and around the endothelial cytoplasm, and endothelial swelling and proliferation. When the disease fails to respond to therapy, the glomeruli may progress to complete hyalinization as in chronic glomerulonephritis.

These observations illustrate the difficulty in attempting to classify each lesion into a separate morphologic category. It is evident that changes considered characteristic of the nephrotic syndrome, acute and subacute glomerulonephritis, and chronic glomerulonephritis may be present in the same biopsy specimen. Therefore, the main purpose of electron microscopy is to delineate the changes present in each case of the nephrotic syndrome, in an attempt to determine the severity of the lesions as an indication of prognosis and selection of therapy. ★★★

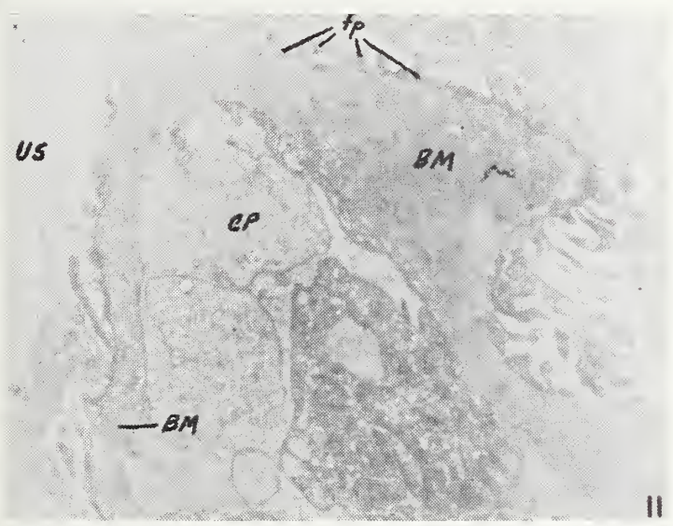


Figure 11. Case 3. Note diffuse basement membrane thickening and marked nodular thickening. There is moderate swelling of endothelial cytoplasm. The epithelial foot processes appear normal. × 15,000. (Electron micrograph reduced from actual size by 51½ per cent.)

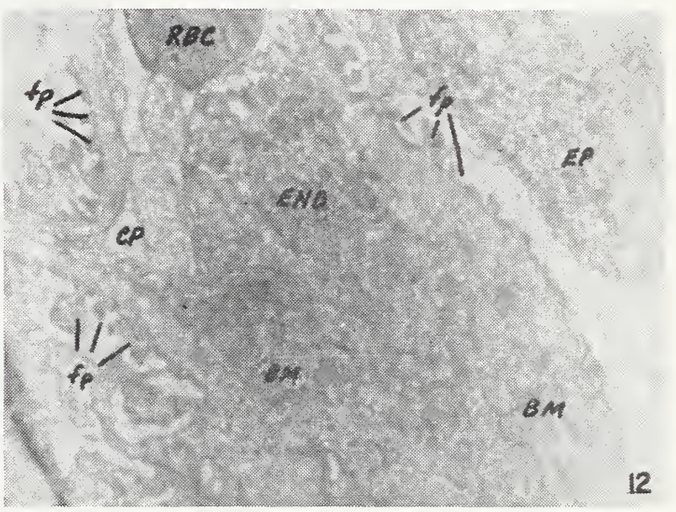


Figure 12. Case 3. Accumulations of newly formed basement membrane material are shown interlaced with endothelial cytoplasm with almost complete capillary occlusion. × 17,000. (Electron micrograph reduced from actual size by 51½ per cent.)

2500 North State Street

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Weber-Christian's Disease: A Case Report

J. GORDON DEES, M.D.
Jackson, Mississippi

The response of Weber-Christian's Disease (nodular nonsuppurative panniculitis) to Staphcillin is reported. Prior to the administration of Staphcillin, a number of antibiotics had been used on this patient with only partial success. The author points out that no conclusions can be drawn from one case, but that the data may prove valuable to other physicians faced with the same disease.

On Dec. 27, 1959, a commercial fisherman and painter, white male, age 61, was seen on a house call because of soreness in the left leg of one week's duration. He had previously been fishing in the Pearl River and thought he might have bruised his leg on the boat seat.

INITIAL EXAMINATION

Examination revealed tenderness with increased heat in the popliteal space of the left leg and 2+ edema of the left thigh. It was thought at this time that he had a venous thrombosis and accordingly he was given Orenzyme, two tablets four times a day, and Dicumarol, 50 mg. twice a day, plus bed rest.

On Jan. 8, 1960, he was seen again at which time the upper thigh was brawny with increased heat. The indurated area was incised and it freely bled a thin, watery appearing blood. A rubber tissue drain was inserted. Dicumarol and Orenzyme were discontinued, and he was given 600,000 units of penicillin.

On a house call on Jan. 9, 600,000 units of penicillin were given and because of excessive bleeding, 2 cc. Koagmin were given in the muscle. On Jan. 10, he was allowed on crutches for bathroom privileges, and 600,000 units of penicillin were given.

On Jan. 12, he was admitted to St. Dominic's Hospital because of excessive bleeding. On admission the hematocrit was 27 volume per cent and the red blood count was 2,000,000. After four pints of blood and 2 cc. of Koagamin every six hours, bleeding stopped. On Jan. 21, the red blood count was 4,000,000 and the white blood count was 9,000. The patient had chills during the night. His leg was improved, but he had a stiffness of the left knee.

On Feb. 25, he was seen because of swelling of the right elbow, the left arm, and the right leg and ankle, with intermittent chills. He was given Panalba, 250 mg. four times a day. On March 10, swelling was gone from his legs, but he had a residual soreness. Both arms and forearms were swollen. There was less redness, but the local heat was increased. He was given 2 cc. of Combiotic and 200,000 units of Syncillin orally four times a day.

On March 12, 2 cc. of Combiotic were given, and some improvement was noted. On March 14, the left arm was approaching normal, and the right leg had improved. He had had no rigors for the two preceding nights. He was given 2 cc. of Combiotic.

On March 16, some swelling developed in the abdominal wall, the right arm remained swollen, and some swelling of the left arm was noted. He was given 3 cc. of Combiotic and his activities were restricted. On March 18, he was given 3 cc. Combiotic. At this time he had had no rigors for several days.

INCISION AND DRAINAGE

On April 7, fluid was accumulated in the subcutaneous tissues of the right arm and forearm which gravitated on change of position. A large, dilated lymphatic vessel could be identified as clearly as though it were a vein. Incision and drainage were done, and a large amount of serous

From the Department of Surgery, Mississippi Baptist Hospital.

drainage occurred. The fluid could actually be milked from the subcutaneous space in a considerable stream. A coagulase positive hemolytic staphylococcus was found in the culture of a specimen taken from the fluid. He was given Altafur four times a day.

On April 25, the right thigh was incised and drained and again a serous fluid was obtained. On Aug. 3, he developed a mass on the right side of his abdomen and complained that his back was sore, as well as the left hip area. The abdominal wall was incised and the culture contained hemolytic staphylococcus coagulase positive. The staphylococcus was sensitive to multiple antibiotics.

TREATMENT

He was given Oleandomycin 250 mg. four times a day. On Aug. 16 an area on the right buttock was incised and drained. On Sept. 5, his medication was changed to Chloromycetin, 250 mg. four times a day. On Oct. 6 incision and drainage of the right flank was performed. He continued to have low grade fever to 101 degrees with intermittent chills and rigors. Incised areas drained serous fluid for four to six weeks.

On Oct. 24 he was admitted to the Mississippi Baptist Hospital for study. History obtained at that time showed that he had been having rigors of short duration, unaccompanied by fever, at intervals for about 26 years. Otherwise, no significant additions to the previously obtained history were secured. There were no familial diseases.

On physical examination there was a temperature of 96.6 degrees, pulse of 78, and blood pressure of 112/65. The patient appeared to be a well-developed, slightly undernourished, adult white male, who seemed chronically ill and complained of shortness of breath. A tender indurated mass, 2 x 3 cm., could be seen and felt in the right axilla near the anterior axillary line. The superior anterior aspect of the right thigh was red and indurated. There was no generalized adenopathy. On the medial aspect of each buttock there was an indurated area. A clear, yellow fluid could be expressed from the right buttock. The above constituted positive clinical findings.

Hemoglobin was 15.8 gm., sedimentation rate, 23 mm. per hour; hematocrit, 47 volume per cent; white blood count, 9,250; polymorphonuclear leukocytes, 50 per cent; lymphocytes, 43 per cent; monocytes, 5 per cent; basophils, 1 per cent, eosinophils, 1 per cent. Blood sugar was 78 mg., total protein, 8.62 mg.; albumin, 3.6 mg.; globulin, 2.02 mg.; urea nitrogen, 23 mg.

Urinalysis showed a specific gravity of 1.001 with albumin and sugar negative. Microscopic examination showed a rare white blood cell and squamous cell. The VDRL was negative. The heterophile antibody was negative, SGOT was 9 units.

The alkaline phosphatase was 4 units, serum transaminase, 5 units; serum lipase, 150 units; cholesterol, 197 mg.; prothrombin time, 100 per cent of normal; cephalin flocculation, 1+; serum bromide, 1 per cent; calcium, 10 mg.; chlorides, 600 mg. or 102 mEq.; creatinine, 1.1 mg.; phosphorus, 2.7 mg.; sodium, 140 mEq.; uric acid, 3.8 mg.

On Nov. 5, laboratory examination of fluid from the thigh showed protein 1,100 mg.; white blood count, 45,500; polymorphonuclear leukocytes, 83 per cent; lymphocytes, 17 per cent; culture negative.

On Nov. 15, the blood culture was reported negative. Electrophoretic serum analysis of the albumin-globulin ratio was 1.1-2.2. There was hypoalbuminuria, and the bone marrow was normal, L.E. cell preparation normal, and electrocardiogram normal. X-rays of the chest showed mild generalized emphysema. Barium enema, upper gastrointestinal examination, and gallbladder examination were normal. Hands, knees, and wrists were normal except for mild osteoarthritic changes of interphalangeal joints.

HOSPITAL COURSE

This patient was seen by several internists, one of whom wrote a consultation report of migratory septic lymphangitis, either inflammatory or secondary to malignancy most likely. The consultation concluded with this statement: "I never saw anything quite like this before." This seemed to be the opinion of all the physicians who saw the patient. Biopsy of the indurated area was agreed upon.

On the night of admission, he had a rigor and was given Sulfadiazine, 1 gm. three times a day. In few days the swelling in the right axilla began to subside. Swelling appeared in the region of the left groin and the thigh where the biopsy specimen was obtained and the culture specimen taken Nov. 3. The biopsy site drained serous fluid freely. On Nov. 7 the biopsy was reported to show Weber-Christian's Disease. The culture was negative.

The report on the biopsy stated:

"Intact epidermis with moderately, chronically inflamed dermis. An extensive inflammatory reaction present within the subcutaneous tissue. Large

portions of the fat have been replaced by highly cellular young fibroblastic tissue containing numerous newly formed capillary vessels and heavy infiltration of lymphocytes and monocytes with a sprinkling of polymorphonuclear leukocytes. In other areas, where the fibroblastic changes have not taken place, the acute inflammatory reaction is more pronounced with evidence of fat necrosis. However, in these areas too there is a progressive conversion of fat into organized fibrous tissue. Diagnosis: Nodular nonsuppurative panniculitis (Weber-Christian's Disease)."

A conference on preferred therapy was held and steroids were recommended but with a poor prognosis. It was the author's feeling that this patient had a low grade inflammatory process which could be due to staphylococcus. Since two previous cultures had been positive for staphlococcus and since the patient had been treated continuously for 11 months with all available antibiotics in large doses, it was decided to give him Staphcillin, which had been in use only a short time in the Mississippi Baptist Hospital.

Staphcillin, 1 gm. intramuscularly every six hours, was begun the afternoon of Nov. 7 and by Nov. 9 he began to feel better. The lesions in the axilla and thigh showed definite improvement. On Nov. 14 he was discharged since he had shown progressive improvement with 1 gm. Staphcillin every six hours intramuscularly for seven days. At this time the lesion in the axilla was much decreased and the drainage was much less from the thigh and the indurated area was smaller. After 10 days of Sulfadiazine three times a day, all medication was discontinued. His swelling was completely gone and there was no drainage. He was advised not to resume work until after Jan. 1, 1961.

When seen on Feb. 12, 1961, he had returned to normal activities. He remained well and happy.

SUMMARY

The response of Weber-Christian's disease to Staphcillin is reported. No conclusions can be drawn from one case, but the report may prove valuable to other physicians faced with the same disease. The disease was only partially controlled by numerous antibiotics which were used prior to the Staphcillin. ★★★

775 North State Street

C'EST L'VIE

Three research scientists working on an international project received lethal doses of radiation exposure. Each was given a month to live. Their respective governments granted each his heart's desire for the final month of his life.

Said the Frenchman: "I would like to have a villa in the south of France, some wine, some food, a little Brigitte Bardot—and then I would die happy."

The Britisher put it this way: "I'd like a spot of tea with the Prime Minister, an audience with Her Majesty, and then I shall gladly die."

The American was asked, "What would you like?" Immediately he replied, "I wanna see another doctor!"

The Incompetent Cervical Os

FERD M. SHELL, M.D.
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The condition known as incompetent cervical os was first described by Lash at the University of Illinois, Shirodkar of India, and Palmer and Lacomme of France. The diagnosis is based on a history of repeated abortions in the second trimester. The author discusses diagnosis and treatment and presents three case reports. He also includes a survey of Mississippi Ob-Gyn Society members on the present treatment of the disorder.

SINCE 1956 MORE AND MORE reports have appeared in the literature concerning incompetent os of the cervix. This condition was first described by Lash at the University of Illinois, Shirodkar of India, and Palmer and Lacomme of France. The diagnosis is based on a history of repeated abortions in the second trimester. These abortions are usually characterized by a history of painless dilation of the cervix with presentation of membranes at the external os of the cervix followed shortly by a relatively painless abortion.

CURRENT MANAGEMENT

At present, the diagnosis is usually made after the obstetrician has seen the patient abort previously during her second trimester. These patients usually have a history of slight spotting and a sense of fullness. Pelvic examination often reveals a dilating and effacing cervix, with perhaps bulging of the membranes. The first attempt to correct the incompetent cervical os is usually unsuccessful, and it is in subsequent pregnancies that a viable infant is salvaged.

In the nongravid state, physical and pelvic examinations reveal no obvious abnormalities. The physician has to suspect this condition and to search for it to make the diagnosis. The one essential criterion for the diagnosis is to find an incompetent cervical os.

Originally it was felt that at least two abortions were necessary in the second trimester before this diagnosis could be considered. However, the diagnosis may be made after the first abortion if the incompetency is found to be present. Cervical incompetence will usually be found after a history of cervical trauma received during a previous delivery or surgical procedure. It is possible that even repeated dilation and curettage procedures and conizations of the cervix can result in cervical incompetence. Naturally, congenital anomalies of the uterus and cervix with an inherent weakness of the internal os account for this condition in some cases.

Various methods of diagnosis are available to the obstetrician. This condition should be suspected whenever there is a history of repeated abortions during the second trimester. However, the main criterion in making the diagnosis is to find a weakened or dilated internal cervical os. This can be done by various methods such as palpation, examination with a uterine dressing forcep, or by finding the admission of a number 7 or 8 Hegar dilator into the cervix causes no pain to the patient. Hysterosalpingography has been used to demonstrate a funnel type internal os and isthmus. Various technics using a catheter with an attached balloon have been employed. Probably the most common method of making this diagnosis is the use of the cervical dilators.

THREE GENERAL TECHNICS

Three general technics have been developed in the correction of this condition: (1) Lash's technic in which obvious lacerations and defects of the internal os are repaired in a nongravid state, (2) the Shirodkar or modifications of the Shirod-

Read before the Mississippi Ob-Gyn Society, Jackson, November 18, 1960.

kar procedure during which a purse string type ligature is placed around the internal os beneath the vaginal mucosa, generally after the 12th week of gestation, (3) Baden and Baden's technic in which a bridge or a so-called "bridge trachelo-plasty" is used. Dr. Baden has recently come out with a change in his technic of the "bridge trachelo-plasty." Originally he debrided the cervical mucosa laterally and reapproximated the edge of the debrided area, leaving a central external os for drainage. In his most recent paper he states that he closes this defect with transverse denudating or debriding the area of the exocervix, leaving two openings present for drainage. Baden, of course, does his repair in the pregnant state.

TYPES OF MATERIAL

Numerous types of material have been used in the repair of this condition. Lash advocates the use of number 2 chromic catgut sutures in repairing the excised area of the defective cervix, the vaginal mucosa being closed with number 0 chromic catgut. Shirodkar advocated the use of strips of fascia taken from the fascia lata. Various technics have been advocated using black silk or silk sutures, wire sutures, ox fascia, and other materials. Baden uses number 0 chromic catgut for his repairs. Recently more and more cases are being reported in the literature with the successful use of Mercilene strip—a synthetic, nonabsorbable band by Ethecon.

The treatment of this condition, of course, must be individualized. The treatment depends upon the cause. If there is a history of midtrimester fetal loss and deep laceration of the cervical canal, this defect could probably best be repaired by trachelorrhaphy in the nonpregnant state following the technic of Lash.

PURSE STRING CLOSURE

Purse string closure of a deeply lacerated, obviously torn cervix is not always the proper treatment for cervical incompetency. The purse string type of repair is usually reserved for those cases in which no definite abnormalities or obvious lacerations can be visualized, but there does exist a generalized weakness of the internal os. This type of repair is best done in the gravid state and it is usually done between the 12th and 28th weeks. It goes without saying that the purse string type of repair is not attempted if labor is obviously present or if the membranes have ruptured. In one case in the literature this procedure was done with ruptured membranes with a twin pregnancy and this resulted in carrying the pregnancy to the successful delivery of one viable child.

Various methods of delivery have been utilized in these conditions. It is the opinion of most of the writers that if further pregnancies are desired and the cervical repair has been successful with the purse string method, cesarean section is in general elected. This leaves the cervix intact without further trauma and without further possibility of lessening the patient's chances of becoming pregnant again. Usually following the Lash type procedure the patient is allowed to deliver vaginally. In some cases where nonabsorbable sutures have been used, the sutures have been removed and the patient allowed to deliver vaginally. If the Lash type procedure is not indicated by the defect present, repair in the gravid state appears to be the best solution. If further child bearing is anticipated, the patient should be delivered by cesarean section.

The purpose of this paper is to present three case reports and a review of what is being done in Mississippi for the management of incompetent cervical os. A survey was made of all 54 members of the Mississippi Ob-Gyn Society with a simple questionnaire. Forty replies were received. Tabulations from these questionnaires show what has been done in Mississippi in the past three years and how the condition is currently being handled.

CASE REPORT 1

Mrs. J. B. H., 32-year-old white female, gravida 4, abortus 2, now para 2, was originally seen on March 3, 1959, for a postabortal check-up. She had had a premature delivery of a nonviable infant on Dec. 9, 1958. At that time physical examination was completely normal, and her first child was two years old. Her second pregnancy had terminated in the premature delivery of a nonviable infant at about 18 to 19 weeks. The purpose of her original visit was to find out whether it was advisable to try to have another child. The history of a painless, spontaneous abortion was not obtained.

The patient was not seen again until June 12 when she gave a history of a last normal menstrual period of April 30. A presumptive diagnosis of a uterine pregnancy was made, and the patient was placed on the routine care. The patient had a normal prenatal course and was seen in the office on Sept. 11, at which time fetal heart tones were present, the fundus was enlarged to one and one-half fingers breadth above the umbilicus, and the patient was having no cramps, bleeding, or spotting.

On Sept. 19 the patient called and stated that she had a sense of fullness in the pelvis and that she had had a slight amount of spotting. I instructed the patient to meet me at the hospital where an immediate pelvic examination was carried out and the

cervix was found to be dilated approximately 2½ to 3 cm. with a bulging bag of waters and a fetal extremity visible through the bag of waters. There was no active bleeding, no uterine contractions, and the bag of waters was intact.

The patient was carried to the operating room. General anesthesia was used. The cervix was placed on traction with ring forceps and the bag of waters was gently replaced. With large cotton sutures a purse string suture was placed around the cervix at the juncture of the internal os. Bleeding was minimal and the patient was placed back in her room on sedation, antibiotics, and progesterone. She went into labor approximately 10 hours later, and it was necessary to cut the purse string and allow the patient to abort. Postabortally the patient developed a mild right parametritis. She was treated with antibiotics and this condition subsided.

On her six weeks examination the cervix had returned to normal, the parametritis had cleared, and the cervix looked completely normal. However, a No. 7 Hegar dilator could be passed without any pain to the patient. There were no obvious lacerations nor weakened points detachable, and it was felt without a doubt that this patient had a true incompetent cervical os.

The patient was instructed to wait approximately three months and to try pregnancy again. At this time the patient's pregnancy went well until about 15 weeks, at which time she was placed in the hospital and the typical purse string suture, using Ethecon's Mercilene strip was used. This patient carried this pregnancy to 38 weeks at which time a cesarean section was performed and a 6 pound 11 ounce male child was delivered without complications. At the present time no complications have developed with the sutures or the cervix and the present plan is to allow this patient to attempt a second pregnancy without interfering with the cervix.

CASE REPORT 2

Mrs. M. A. B., 22-year-old white female, gravida 2, para 1, abortus 1. Her first pregnancy was without complications except that she stated she had a difficult forceps delivery. Her second pregnancy resulted in a premature nonviable infant at approximately four months in September 1958. This abortion was typically a painless dilation and effacement with passage of the products of conception at home. This patient was seen originally on March 4, 1960, and after obtaining the above history, pelvic examination revealed a mildly lacerated cervix, but the lacerations did not extend into the internal os. On palpation it was felt that the patient had a typical incompetent cervical os. It was possible to pass a No. 8 Hegar dilator through the internal os without any discomfort to the patient. In view of no obvious lacerations of the internal os it appeared that this patient could best be helped by purse stringing the cervix following pregnancy. She was allowed to become pregnant and at 16 weeks a purse string suture was placed around the cervix, using Mercilene again and the patient is now eight months gravid and has had no difficulty whatsoever. The plan on this patient is to deliver her by cesarean section at approximately 37 to 38 weeks.

CASE REPORT 3

The third case is that of a 19-year-old white female who gave a history of three second trimester losses and a history of dilation and curettage procedures. This patient was treated by another physician in Michigan and following her third premature delivery a Lash type procedure was done. When this patient was originally seen she was having normal periods, the temperature charts indicated ovulation, and tubal insufflation revealed patency of the tubes. The patient is now three months gravid and the present plan is to follow her closely and deliver her vaginally.

As stated earlier, 54 questionnaires were sent out to the members of the Mississippi Ob-Gyn Society with a total of 40 replies being returned. These replies reported a total of 50 cases of incompetent cervical os which have been treated in Mississippi the past three to four years.

The questionnaires showed that six cases were treated with the Lash type repair resulting in the delivery of three infants—two vaginally and one by section because of a breech. One of these patients aborted at four months and two are still pregnant. The patient who aborted at four months was repaired with chromic 1 sutures on the deep layer, braided wire on the superficial layers. This patient aborted her pregnancy after the repair and was again repaired. She was pregnant again and delivered a viable child. At the time of this delivery she received a severe laceration of the cervix and this was repaired at the time of delivery. Subsequently, this patient has been lost to follow-up.

Ten cases were treated with the Shirodkar type repairs using fascia, fascia lata, or ox fascia. Seven of these patients went to term with six being delivered by cesarean section and 1 vaginally. Two of the pregnancies were lost and one pregnancy was lost six hours postoperatively. In one case the fascia strip became infected resulting in a slough and an abortion. In one Shirodkar case the patient had two full term pregnancies following the first repair.

The questionnaire showed the use of Mercilene for Shirodkar repair in 23 cases resulting in the delivery of 15 viable infants—12 by cesarean section and three vaginally. Five cases aborted prematurely and three are still pregnant but undelivered at this time. Three cases were reported who had repeat deliveries with the Mercilene strip intact.

Some doctors reported they treated incompetent cervical os with absolute and complete bed rest. The questionnaires showed a total of seven cases with eight pregnancies handled in this manner. Of these four have gone to term and delivered vaginally. There were two premature deliveries and two of the patients are pregnant and undelivered at this time.

Three cases were reported using silk or some suture material other than fascia or Mercilene and these three were all unsuccessful. One delivered a premature, infected infant, one aborted at five months, and one had an abortion followed by a slough and partial amputation of the cervix.

One case was reported in which a typical Lash procedure was performed in the nonpregnant state and a band of braided wire was used in the pregnant state. This patient delivered a viable infant by cesarean section.

Ten physicians reported they had seen no cases of incompetent cervical os during the last five years. A total of 13 cases were reported on which no treatment and no therapy was offered. Of these cases, three aborted prematurely, two are pregnant and undelivered and eight are not pregnant at this time. Of the three deliveries, two of the three children were classified as premature—one survived and two died.

DISCUSSION

It is apparent from the replies of the members of the Mississippi Ob-Gyn Society that the best results are being obtained with the use of the Mercilene strip placed around the cervix beneath the mucosa during the pregnant state. It is also apparent that some of the difficulty that was encountered with this procedure has now been corrected because the Mercilene purse string suture is being anchored with nonabsorbable sutures both anteriorly and posteriorly. Most of the physicians contacted used prophylactic antibiotics, penicillin or penicillin and streptomycin following the application of the purse string suture. Bed rest following surgery is usually requested for approximately a week and then gradual resumption of activity.

It has been the experience of most of the surgeons that pelvic rest was indicated following the application of the purse string suture and this was continued throughout the gestation. The use of a maternity girdle appears to offer an additional benefit to these patients while they are awaiting delivery after surgery. No particular benefit has been noticed with the use of progesterones or estrogens in preventing abortion. Delivery in most cases is carried out by cesarean section if further pregnancies are anticipated. ★★★

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CURSORY NOTE

A London psychiatrist has just completed research on swearing. The main conclusion was that swearing is a good, healthy habit which relieved high blood pressure caused by daily tensions. A lusty "damn" a day keeps the doctor away, according to Dr. Helen Ross. Her studies also revealed that upper-crust cussers are more prone to blasphemy while the working class sticks to obscenity. Dr. Ross' explanation: The upper class is rebelling against early religious training, the lower class is renouncing sexual taboos.

Care of the Aged

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The care of the aged is fast becoming one of the nation's most important problems. The author discusses the relationship of various interest groups to this problem and concludes that medicine is primarily responsible for finding a solution. He considers how ancient societies treated their elderly citizens and says that American society is "immature and youth-originated." He recommends a number of changes, including abolishment of compulsory retirement, and suggests that the most important factor is the contributions that mature older citizens can make to society.

A GREAT DEAL OF ATTENTION is being given to the health problems of the growing elderly proportion of our population. Out of this, it is to be hoped, will come programs and policies that will meet the needs without imposing on us the costly regimentation that some proposed legislation would make inevitable.

One point deserves to be much more widely understood than it is: The problems involved are not, by any means, confined to medical care and hospital and nursing home service. Dr. Edward L. Bortz, a past president of the American Medical Association, has made that clear. As he puts it, major afflictions of older citizens today can be traced to faulty diet, flabby bodies, excessive fatigue, and aimless living. And, he adds, a do-it-yourself health program designed to cure or alleviate these afflictions can be the best insurance policy for a longer, healthier life.

In his words, our society is "immature and youth-originated." So this is the time to cease "worshipping the glamour and romance of youth" and concentrate on the contributions that the mature older citizen makes to our society.

One of the most urgent needs is to abandon the custom of compulsory retirement at age 65 or any arbitrary figure. Great numbers of people now attain their period of top performance at 65 or older. To consign them to the ranks of the idle is to do them a grave injustice and to deprive the nation of energies, abilities, and experience it can use to vast advantage.

20TH CENTURY PARABLE

The old lady in the bus looked at the studious little boy beside her and turned conversationally to his mother. "How old is your boy?" she asked. She received more of an answer than she had bargained for. "Physically, he's 10 years old. Emotionally, about 7. Intellectually, he is 15. Counting birthdays, he'll be 9 years old next Thursday." The old lady was taken back for a moment. She wondered what her answer would have had to be if the serious little boy who was 10, 7-15, and 9 years old had asked her what her own age was.

Ask a scientist about this age business. He will tell you that aging is a very complicated process. It goes forward at quite different rates in different people. And, in any one individual, aging goes ahead at different rates in different parts of the body and for different physical and mental abilities.

Most of our abilities, strength, learning capacity, and emotional stability, increase most rapidly through childhood and usually reach a peak somewhere in the 20's or 30's. Then some, like strength and agility, start to decline. Others, like learning capacity and memory, decline much more slowly. Many people of very advanced years have lost little or none of these abilities; in maturity of judgement and tolerance, they may continue to gain.

What does this all add up to? Briefly, it means that there is no day on which you suddenly be-

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come old and realize the stairs are steeper and the print in the telephone books is smaller.

REALIZATION OF AGE

When did you realize you were getting old? Some years ago a scientist put this question to a number of elderly people. Some of the answers were quite surprising. One said he had started to feel old at the age of 18. Another didn't realize that age was creeping up until he was already 82. Realization that we are getting older often comes, when it does, as something of a shock. One person may suddenly realize that illnesses keep piling up and that they are harder to shake off. Another may discover that, although he can still do a day's work, it takes two days to get it done.

Retirement or loss of a job are other shocks that may usher in the later years. It can be a good thing to face the fact of aging, because aging brings new and challenging problems. And if you realize this fact, you have made good start on planning for successful years ahead.

PERCENTAGE OF ELDERLY

There are many groups studying what to do with our aging population. They have estimated that one out of every 10 people will be over 65 years of age by 1970. With such a percentage it will be necessary to change our philosophy of retirement at the age of 65.

The plight of many aged persons now has become a major problem of world-wide concern. Medical science is still concerned, for the most part, with repair and restoration. Until recently the positive factors of human development, maturation, and aging have been ignored.

Many individuals, small groups, communities, civic, and religious, city, county, and state groups, as well as many national organizations with a staff of officers, and legal talent with political support are sponsoring their particular ideas for care for "those golden years."

Old age is a natural period of human existence. It is inevitable when individuals survive the innumerable diseases and deteriorations which, since the beginning of time, have eliminated others from the world of the living. Whether the later years are to be productive of continued enjoyment and usefulness to society depends primarily on the individual himself and, secondly, on the supports which the family and society may furnish. A positive philosophy becomes essential in order that the dullness and boredom of advancing years may be kept to a minimum.

Census reports show that there has been an increase in the percentage of the U. S. population that is over 65 from 4.1 per cent in 1900 to 8.5 per cent in 1959. There were 16 million persons over 65 in 1959.

The rapid progress of science is bringing one after another of the common diseases and deteriorations under control. Consequently, more and more individuals are going to reach the century mark. This growth will have far-reaching effects in all phases of human experience. Man's hope for long life is noted in the most primitive biological drive of nature—the instinct for self-preservation.

TWO SOCIETIES

In the United States there are two organizations dedicated specifically to the study of aging, the Gerontological and the Geriatric Societies. The former includes not only qualified scientists and clinicians but, in addition, sociologists, economists, social workers, and informed private citizens. The Geriatric Society is a medical organization primarily, with the focus on clinical practice and research. It has a membership of over 3,000.

The broad spectrum of human aging includes a great many areas of importance to physicians. Nevertheless, there are certain primary issues that should be given priority. The better the health of the older citizens and the better their medical care, the less time will be spent in the hospitals. The better they are integrated into society in productive capacities, the less need will there be for financial assistance.

A CUMULATIVE EVIL?

What has been the experience in the regard to care of the aged? While primitive man, like the child, apparently gave no thought to his old age, the ancients in the golden era of Greece and Rome, for the most part, regarded advancing age as a cumulative evil.

The unfolding progression of man's knowledge of himself is reflected in the extension of his life span. By improved living conditions, better sanitation and nutrition, plus elimination of many diseases and deficiencies that were deadly in earlier days, longer life is the major dividend of scientific progress. It is becoming more and more evident that man can pretty much control his ex-

ternal environment, and the idea is being fostered that the biology of living may be so improved that a more healthy human being is possible—one capable of less disease, less deterioration, a more vigorous body with potentials of performance and achievement that may well overshadow the spectacular technical accomplishments of this sputnik era. The long sweep of man's groping search for a more satisfying life is opening new ways for his growth and development.

LONGEVITY OF ANCIENTS

Longevity of prehistoric man is a topic about which practically nothing is known. There were no gerontologists among the ancients. Life, then as now, was a precarious experience. But sufficient data has been discovered about tribal customs which indicate the absolute necessity that each member of the group or tribe had to contribute to the vitality and protection of the group.

Men of the old stone age lived a rugged existence. When no longer of any use, various methods of eliminating the aged and unfit were practiced, including cannibalism.

A PLACE FOR THE OLD

In ancient Greece, advancing age was looked upon as a calamity by many writers. Yet Sparta had its Gerousia, a council of 28 men over 60. When it was no longer a duty to bear arms, the majority of the old men of Sparta were put to death.

Even the Bible quotes respect for the aged. Psalm 71, the seventh verse, says, "Cast me not off in the time of old age. Forsake me not when my strength faileth."

In early Rome, parental authority and family life were well developed. The Roman senate was made up of old men. Their wisdom formulated sound laws, and established codes and procedures that were the ultimate basis of English law. Great authority was given presbyters and elders in English society and mature citizens were greatly respected.

BASIC DISCIPLINES

Our increasing elderly population faces the future with varied degree of misgiving. It becomes us all to take the matter to heart and to join in an effort to afford the elderly happiness and well-being throughout the years left them.

Of all the disciplines involved in the problem, medicine and economics are the two basic and critical ones. The physician, who is at once a citizen and a taxpayer, is the hub about which this wheel of activity revolves. Without his active participation, any plan or program formulated for the care of the aged cannot be set into motion.

What is the physician's role in the care of the aged? It can be predicted that the average length of life and the number of older people will increase still further. It is necessary, therefore, to proceed with all possible speed to control the diseases and deteriorations that come with age insofar as possible. It is also necessary to create a social, economic, and health climate which will permit our middle-aged and older people to continue to lead proud and independent lives which will restore and rehabilitate many of them to useful and dignified positions among their neighbors and which will prevent further aggravation of their problems with resulting increased social, financial, and medical burdens.

IMPORTANT MEDICAL AREAS

Areas of importance to medicine may be divided into three categories:

1. Care of the aged for whom life is far spent and the ability to adapt is lessened; a vegetative existence is all that remains. The kindly protection most required is that of supplying the basic needs of the body by nursing care.

2. Medical care of older individuals. This embraces the current practice of medicine. Repair of broken bodies, organs, and spirits, insofar as possible, make up curative medical practices.

3. Positive health—the prevention of diseases, the encouragement of energy maintenance, and specific motivation—represents a new field of great potential for aging man.

MOST COMMON PATHOLOGY

The most common pathology of elderly individuals involves the vascular system, neoplasms, skeletal system (osteoporosis, osteoarthritis), and nervous and mental disorders. A comparison of the most common causes of death in 1900 and those 50 years later indicated a rapid increase of the fatalities due to disorders of the circulation. The variety of diagnoses listed on death certificates include arteriosclerosis, cerebral thrombosis, cerebral complications, coronary occlusion, myocardial infarction, hypertension, and other vascular diseases. The morbidity and mortality of all of these conditions have a common denominator, that is, a pathologic condition involving the vascular system.

The human life span, which many authorities now place at approximately 100 years, will be extended as the common diseases or deteriorations which destroy life are brought under control.

PERFORMANCE DIMINUTION

While there is a diminution in performance capacity with advancing age, training can improve performance in older bodies. The more a muscle is kept active the better its ability to perform. Alternating rest periods add to the performance ability of the older individual. A high standard of physical health means that the individual can carry on heavier muscular exercise for a longer period of time. These observations point to the advisability of aging individuals maintaining their muscular equipment in good tone.

Paramount in discussion of aging tissues is consideration of the vascular system. A logical argument can be made that all age changes actually are secondary to changes in the circulation. The relative position of the dividing line between physiologic and pathologic processes in arteriosclerosis is important. Lansing and others have studied alterations in the vessel wall which appear with the passage of time. The mechanistic theory of thrombosis-induced arteriosclerosis sponsored by Duguid is somewhat in this area of age change as well. Changes in the intima have been seen even in infants. Studies of the blood vessels of young Americans killed in battle showed much premature change. However, even acknowledging to the fullest a chronologic factor, the real scourge of atherosclerosis appears to be primarily a disease process. If it is not initiated as a disease, at least it is perpetuated as such.

FACTORS IN ATHEROSCLEROSIS

Many factors are operative in atherosclerosis: heredity, sex, exercise, associated disease states, blood pressure. Yet when those factors, which can be corrected, are accounted for, there still remains a large number of Americans crippled and killed by the disease for which some other factor must be held accountable. At present, the most likely explanation is that of diet. We are certainly in an era of public awareness of all diseases and this one in particular. From controlled studies it is evident that dietary fat is of prime importance in atherosclerosis. Yet, even you and I have seen patients in their 80's and 90's who still like their pipe, cigar, or cigarette and think that breakfast without bacon and eggs is no breakfast at all.

The cause of mental deterioration in the elderly is as yet an unsolved problem. It has been shown that satisfactory mental function may occur even with advanced brain pathology; conversely, many individuals with no demonstrable lesions in the nervous system have become mental invalids.

If it is our goal to aid the increasing millions past 50 in our culture to achieve a more meaningful adjustment to the realities of longer life, then some facts emerging from social, psychological, and sociological studies are important to us.

MENTAL ILLNESS IN ELDERLY

Mental illness, largely absent in childhood and early youth, grows steadily in frequency in earlier adult life, hits a plateau in the middle years, but mounts rapidly in frequency in old age. Study of individual cases points out the contribution of constitutional inadequacy or instability and physical diseases as contributing factors. Moreover, it is becoming increasingly evident that largely controllable stresses of life play at least a precipitating part. Medical education in the past quarter century has found it difficult to systematize and classify the data that has appeared from the numerous centers of science and culture throughout the world. Medical practice is undergoing a transformation. In addition to concern for the treatment of disease and trauma, modern medicine is widening its horizon. Progress in the health realm has arrived where recognition of the enormous potential of the human body and mind has occurred. The promotion of positive health, in addition to cure of disease, has entered the realm of medical science. What man may be will become an exciting new area of medicine in the latter part of the 20th century.

Medical education is undergoing a transition with new courses in growth and development in some schools which furnish opportunity for students to develop a positive attitude concerning health, development, and aging of the individual.

SOCIOLOGICAL PROBLEMS

In the widening approach of science and its concern for health insurance, the sociological problems touching on the health and satisfactory function of the individual within the social fabric, are brought into the realm of medical interest and

responsibility. This is the modern look in medicine. It is an exhilarating new dimension, for medical science can now offer a healthier living program. The new knowledge bearing on longer and healthier living should certainly have a wholesome impact on society.

AN UNFORTUNATE LAG

There is a considerable lag between the information available on maintaining health and its application and teaching in the schools of the nation. This represents a unique challenge to the medical profession. Unfortunately, medicine has only recently turned its attention to the customs and attitudes of society which have acted in a detrimental manner on older people.

As many of the common acute diseases have been brought under more effective control, long-term disorders have become the principal threat to the health of older people. Public institutions are heavily overloaded by patients suffering from a break in the integrity of the vascular system, skeletal system, neoplasms, and nervous and mental disorders. These four diseases must be neutralized if man is to enjoy longer life.

RELAXING OF FAMILY BONDS

Relaxing of family bonds and loyalities has resulted in two common and serious social maladies, juvenile delinquency and disregard for the health and happiness of the elderly. A recognition of the intangibles bearing on the family living is essential. Sociologists are studying various phases of family life in an endeavor to revitalize the basic values inherent within the family circle. A conference under the auspicies of the Insurance Companies of North America, held in California in January 1959, highlighted the need for study of the family as it bears on the health of all its members. Well-adjusted healthy families are the basic units of a strong, healthy community. A population within two decades including 25,000,000 citizens 65 years of age and older will depend upon a healthy integration of these oldsters within the social fabric in a meaningful capacity. This is of first importance. In the final analysis, the fight against old age is not so much a battle of the deteriorations of the body as it is for the preservation of the capacity for happiness.

To achieve this goal for a vigorous society, outmoded manners in the realms of education, industry, and government must be altered. The custom of compulsory retirement, at an age when many individuals have attained their top performance capacity, must give way to more realistic programs. These should be plans looking forward to a second career. In this way more enduring satisfactions bearing on work, recreation, and a sense of belonging will result.

Building social patterns takes time. It requires leadership. It must be based on careful thought and study and this, in turn, must be developed by pilot activities over a period of time to be effective.

Left alone, much of this would be done by welfare workers and politicians. If done on this basis, there is no assurance that the final result will be in line with the thinking of other community leaders, including doctors, nor will it reach its full development as well or as quickly as if guided by physicians.

MEDICAL LEADERSHIP

The assumption of a role of leadership in this field is not new to medicine. Industry and science have shaped the fabric of our society by the products they have developed and the new fields of endeavor they have pioneered. All these new changes have been accomplished by getting the public to accept and adopt a new social pattern.

Medicine has a large stake in building such a society. It has the needed skill and experience. What is being done and can be done to insure that the transition will be made in a well-thought-out manner, with clear objectives and carefully developed policies to the end that our senior citizens, 20 years hence, will contribute a new and constructive dimension to our democratic society.

COOPERATION ESSENTIAL

In conclusion, I wish to emphasize that care of the aged requires cooperation of all parties concerned. Compulsory retirement at age 65 is wrong and is an insult to our peers. Our aging population should be made to feel that they belong and that they are wanted, loved, and respected by all of us. They should have the opportunity and privilege to continue to use their talents and not expect a dole from Uncle Sam. In case of need, the family should care for their needs. If necessary, local goverment agencies should help. Federal aid should be turned to as a last resort for it will make our aged a captive segment of the government and that is socialized medicine. ★★★

445 North Pennsylvania Street

Clinicopathological Conference XVI

Conducted by the Department of Pathology
University of Mississippi School of Medicine
Jackson, Mississippi

During the two months prior to this patient's hospital admission, he had lost 40 pounds in spite of a good appetite. He had a history of marked hypertension, constipation, and black and tarry stools. A film of his chest was reported to show infiltrates in both lungs. He was admitted to the University of Mississippi Teaching Hospital on Oct. 30 and died on Nov. 13. Laboratory data are discussed and the autopsy report presented. Discussers are Dr. John R. Snavely, Dr. Robert D. Sloan, and Dr. Ben B. Johnson of the University of Mississippi School of Medicine. Dr. Edward A. Gall, editor of the American Journal of Pathology, is a guest participant.

Dr. John R. Snavely: "This man was 55-years-old and apparently had been in pretty good shape most of his life. He was admitted on Oct. 30, 1960, to the University Hospital with quite a short history. A month or two earlier he had noticed that he was losing weight in spite of a good appetite, and he chalked up a 40 pound weight loss. Along with this, he had considerable weakness.

"By Oct. 5 he had seen his local physician for the first time and was complaining of urinary frequency and burning. I might say now that in light of the culture which shows up later we shall make a diagnosis of a urinary tract infection with reasonable certainty, and the problem will become one of establishing its relative importance in the genesis of his main illness.

"Prior to admission he was found to be markedly hypertensive. We are not told how long he might have been hypertensive. I suspect that it was not known. He was treated with antibiotics and briefly took hydrochlorothiazide. At this time some hypokalemia was found and later during the patient's hospital course evidence of metabolic alkalosis was discovered. The hydrochlorothiazide could have caused the electrolyte imbalance, but it is unlikely since the medicine was given only a few days.

"By Oct. 12 he had begun to cough up two or three tablespoons of blood, and he had become constipated. This is the first time that we are told about the constipation, and he was also said to have black and tarry stools. A film of his chest was reported to show infiltrates in both lungs. The hypertension had continued and there were rales in both bases. He had lost 17 pounds since Oct. 5 and was referred here and admitted.

"He denied previous illnesses. He had smoked 20 cigarettes per day for 20 years, a reasonably carcinogenic dose. The patient was practically a teetotalar—drinking only a pint of whiskey on weekends. He had been examined by the military in 1946 and was rejected for reasons not explained to him.

"Again, on physical examination, he was found to be definitely hypertensive. He had diastolic blood pressure of the order of 126, was obviously sick, and had fundi which showed a retinal hemorrhage but specifically no exudates and no mention is made of the nerve head.

"There were physical signs which I believe can be interpreted as indicating modest cardiac enlargement. There was a systolic murmur which is not very significant if some dilatation of the left ventricular cavity is assumed. The liver edge could easily be felt and was 8 cm. down, and it is interesting that it was soft. The upper border dullness was in the conventional place, perhaps displaced down some, but I think hepatomegaly is still a safe assumption. The physical examination was otherwise unremarkable.

"Now lest I be accused of sailing under false colors, I want to say that I did see this man while

he was alive. I was not at all sure how the picture should be put together then, and if I have had a follow-up on this autopsy, I do not remember it. I did see the liver biopsy, which is described, and I do remember it in some detail and will use this as part of my discussion.

"The urine exhibited considerable albumin which persisted throughout the examination. There were some white cells, but not a lot, and some red cells, but no casts. Some cocci were seen on the stained sediment and there was a leukocytosis. We are not given the differential, but I am told that it was normal.

LABORATORY DATA

"There was moderately severe anemia, and calculating the mean corpuscular hemoglobin concentration, I find it of the order of 30, which squares reasonably well with the pathologists' statement that the cells appeared normochromic and normocytic. An examination of the 24-hour urine showed everything low. He was not putting out as much creatinine as he should, not as much sodium as one would anticipate on an ordinary diet, nor as much potassium. I don't find this particularly helpful. There was 1 gm. of protein.

"The VDRL test was negative, and I shall discuss the tabulated laboratory data later. An electrocardiogram was not particularly helpful; the QT was long. The serum potassium was low, but I am told that this is one of the things that low potassium doesn't do—prolong the QT interval. I shall attribute this prolongation to myocardial disease, and again this is not particularly helpful.

"The lung fields were clear so we don't have to worry to much about this infiltrate seen previously. The heart was thought to be enlarged confirming the findings on physical examination, and there may have been some peritoneal fluid. This would be of more than a little interest in view of the hepatomegaly and somewhat abnormal liver function tests which are seen later.

"A gastrointestinal series was within normal limits. No barium enema was made despite the constipation and tarry stools. This was an important omission. An attempt was made to describe the kidneys radiographically with 50 per cent success. One ureter was found and the other one was not. The one that was found, however, is reported as normal. Now, this is of some importance because I believe that it eliminates for practical purposes the consideration of polycystic kidneys in our differential diagnosis.

"Treatment was begun, fluids were forced, venous pressure was found normal, modest prolongation of the Decholin circulation time was reported, pericardial friction was detected, and a sputum culture, which I find not particularly helpful in this study, grew out some organisms. The stools continued to have blood.

"He was taking fluids poorly by mouth. A tube was inserted and 3,000 to 4,000 cc. of fluid was forced daily although he put out only 450 to 1,400 cc. It seems that much more fluid was going in that was coming out, and that waterlogging contributed to his troubles. Many times there is a definite limit on how much water can be put into people who are not putting it out. I suspect that this waterlogging was an important factor in this case, and I regard this as a serious error in therapy.

"In an attempt to correct the deranged electrolytes, potassium and sodium were given without effect. The blood pressure stayed up and rales appeared. He was digitalized and was thought to develop a "liver flap." This finding is useful in the recognition of ammonia intoxication but it is by no means specific. It occurs in a lot of other disorders including uremia, and I am not going to jump on ammonia intoxication as a diagnosis here.

"A liver biopsy was performed because of this frankly enlarged liver. I may get called on this, but I did review the biopsy with the pathologist at the time, and it shows an extremely interesting situation that is called various things by various people. I believe the conventional term for it is the Meyenberg complex. It is a congenital disturbance in the portal canal characterized by the formation of small cysts and by excessive fibrous tissue. It is perhaps related to the more significant cystic diseases of the liver.

LIVER CONDITION

"It was important to me that the liver cells that were visible in this specimen all looked normal, and I was not impressed by an inflammatory reaction. I am not willing to think that the liver disease is central to this man's problem; although, of course, it is possible. As I said, the polyponal cells looked pretty healthy to me, and this congenital defect, a hamartoma, was spectacular. He continued to be anemic, somewhat more so. We will get down to the serum studies eventually. The liver got larger. Now here I suspect that an element of congestion is getting into this liver, which was already big. Despite an earlier normal venous pressure, I suspect he was beginning to be waterlogged. I would attribute the increase in size of his liver to a degree of congestive failure.

"By Nov. 13 he was obviously edematous and his weight had shot up 20 pounds. An electrocardiogram showed some changes, and as the uremia persisted, his blood pressure dropped. He passed a large tarry stool and died.

RESULTS OF BLOOD TESTS

"Blood cultures were negative. A test for Bence-Jones protein was negative. Coombs' test was negative. Prothrombin time was modestly prolonged and was not corrected with Russel Viper Venom which I am told is a Stuart factor defect. A serum electrophoresis here shows what we can take to be a slight decrease or very definite decrease in serum albumin and a modest but definite increase in the serum gamma globulin. This goes well with liver disease, but it also goes well with being sick for a long time.

"I am going to concede that his liver was not supplying albumin at a rate commensurate with its loss in the face of his malnutrition, but I am not willing to say that this permits a diagnosis of active cirrhosis of the liver. I already know that he has something that can be called cirrhosis if you want to accept this kind of an increase in fibrous tissue as a kind of cirrhosis.

"The electrolyte series shows that hypokalemia was persistent. Hyponatremia was also persistent and became worse before he died. A CO_2 started out a little high. Without a blood pH we do not know whether this is respiratory acidosis or metabolic alkalosis. I am willing to assume for the purpose of this exercise that it is the latter, and I do not know that I have a good explanation for it.

"The nonprotein nitrogen continued to be high and got higher. This was later underlined by a blood urea nitrogen determination. The creatinine was also elevated, but not in proportion to the blood urea nitrogen. I am inclined to think that there is an element of alimentary azotemia in this elevation of the blood urea nitrogen.

"On the board to my left I have listed a classification for hypertension which I have modified from time to time. I think that you will find that most of your patients with hypertension will fall into one of these passages. Under the renal classification, there are two varieties that are primarily vascular. This is nephrosclerosis, if you wish, and others are those associated with glomerulonephritis and pyelonephritis. I am not able to distinguish among these from the data provided me. I think that it is likely that he is a so-called essential hypertensive who has developed vascular disease of the kidney and secondarily gotten a degree of pyelonephritis. The circumscribed variety is important because of there being curable, circumscribed narrowing of major vessels, unilateral pyelonephritis, and aneurysms. We always look for them, we rarely find them. In the endocrine variety are those due to corticoids and those due to catechol amines. I think both of these possibilities cross your mind in dealing with this patient.

"The possibility that he has an aldosterone secreting tumor is suggested by the severe hypertension and hypokalemia which was perhaps unresponsive to treatment, and a mild metabolic alkalosis. The possibility that he had a catechol amine affair, a pheochromocytoma, is perhaps suggested by the modest elevation of his glucoses, but I am not going to worry about it further except to say that it does cross one's mind. As far as other possibilities, there remain so-called essential hypertension, which means we don't know the cause, and coarctation of the aorta.

"I can't really choose between diffuse kidney disease causing hypertension or essential hypertension causing kidney disease. For the sake of this exercise I shall select essential hypertension with a complicating pyelonephritis and shall assume that whatever hyperaldosteronism is present is associated with the malignant phase of hypertension. This fact has recently been well documented as a fairly constant manifestation. Before I get on in my final attempt to reconstruct this, the films will be shown."

DISCUSSION OF FILMS

Dr. Robert D. Sloan: "As has been mentioned, his routine chest film reveals cardiac enlargement involving particularly the left ventricular segment. The aorta is dilated and tortuous. The overall pattern is quite compatible with the history of hypertension; although aortic valvular disease occasionally will produce this type of configuration. Other than the described cardiovascular changes, the film looked perfectly normal.

"This man during his hospital course had a variety of films of the abdomen. These are essentially similar in one respect—none of them show well the retroperitoneal soft tissue structures. It is for this reason that the possibility of fluid in the peritoneal cavity was suggested.

"An intravenous pyelogram was not feasible, but a left retrograde pyelogram was performed. The kidney outlines are not discernible, but the

pattern of the calyceal system indicates that the kidney is not enlarged. As Dr. Snavely stated, the pattern rules out polycystic disease. The minor blunting of the calyces raises the possibility of pyelonephritis, although on a single film this degree of blunting is difficult to differentiate from overdistention due to the pressure of injection of the opaque medium. A gastrointestinal series was done, revealing no gross lesions in the upper tract."

CONN'S SYNDROME

Dr. Snavely: "Dr. Johnson, will you comment on aldosterone and kidneys and hypertension and whatever else you desire."

Dr. Ben B. Johnson: "Until recently no one would hesitate to call this severe uremia, possibly with potassium-losing nephritis because of the persistent low serum potassium, although he was given large amounts of potassium. About six years ago, Dr. Jerome Conn described what he called primary aldosteronism, and everyone has been looking for this rare condition ever since in such a setting as this. Dr. Conn's patient had hypertension and tetany, marked hypokalemia in the 2 mEq./L. zone, along with metabolic alkalosis secondary to potassium depletion. The peculiarity of this potassium depletion is that even with very large doses of potassium it can be like attempting to fill up a bottomless pit. The serum potassium stays low, in contrast to the usual types of potassium depletion due to diuretics, vomiting, overuse of laxatives, or chronic diarrhea where it is easier to bring the serum potassium up after replacement with a few hundred mEq.

"Immediately after Dr. Conn described the syndrome of aldosterone excess, many others recognized cases of their own. About 50 cases have been reported in just this short time. Many cases differ clinically from Dr. Conn's original case, and very few of them had as severe uremia as our case today. Most of them are young people with hypertension, low serum potassium, which is resistant to being brought up to normal with potassium feeding, and alkalosis. They tend to have persistent neutral or akaline urine. In advanced uremia with serum creatinine of 5.7 mg., we are surprised to see an alkaline urine on the one urinalysis that is given to us.

"Now, I don't remember this patient and I certainly have no knowledge of what was found. Several features for a hormone-producing adrenal adenoma are present in this case, although conclusive data are lacking. Conn's syndrome with mild diabetes has already been described, and mild diabetes is also not an unexpected feature in Cushing's syndrome. The obvious pyelonephritis in our case is quite consistent with potassium-depletion nephropathy. Unfortunately, the alkaline urine pH of 7.5 loses some value as a clue pointing toward Conn's syndrome because the pyelonephritis was due to a proteus organism which in itself notoriously produces an alkaline urine by urea splitting. He also had this marked weight loss in spite of an allegedly good appetite, which is not characteristic of the people with the benign illness that Conn described. Many of them have been known hypertensives for several years, without rapid progression toward death like this man. So the clinical course is not that of Conn's syndrome.

"The severe uremia detracts from the diagnostic value of the available chemistries and the rapid fall in serum CO_2 probably reflects uremic acidosis. The serum creatinine of 5.7 mg., which unfortunately was not repeated, represents at the very best about 10 per cent of normal glomerular filtration. The inability to find one ureter on cystoscopy suggests, since Dr. Sloan didn't see a kidney on that side, there may be at least a congenital defect on that side and that this case may, after all, be true of potassium-losing nephritis. Clinicians have hesitated to make this diagnosis after several cases with this label were found to have aldosterone-producing adrenal tumors, as soon as this entity was described by Dr. Conn. Some observers now question whether potassium-losing nephritis exists and feel that primary hyperaldosteronism is present in all or most of such cases."

POSSIBLE DIAGNOSES

Dr. Snavely: "Thank you, Dr. Johnson. I think that is most helpful. Then your diagnosis is aldosterone-secreting tumor as a leading possibility. Mine will be essential hypertension with vascular changes in the kidneys eventually leading to potassium loss, a potassium losing phase. We had such a patient, as you may recall, at this exercise not too long ago with secondary pyelonephritis. The potassium-depleted kidney is fertile soil for infection. Pyelonephritis is an equal possibility.

"I think the liver is weak because of the occurrence of these microcysts, and I think this contributed to hepatomegaly. I think that there was terminal congestion, and I think that the kidney may well have terminally undergone some cellular necrosis, but I do not believe that liver insufficiency is central in this man's problem.

"Esophageal varices or peptic ulcer should also be considered in this setting. It is nothing more than a guess. We have no right to push it any fur-

ther than to observe that both of these disorders occur in this setting more often than chance alone would allow. I think a tumor of the colon is possible. We haven't ruled that out.

"I prefer to say that the uremia is central, and that as parts of the uremia there occurred peri-

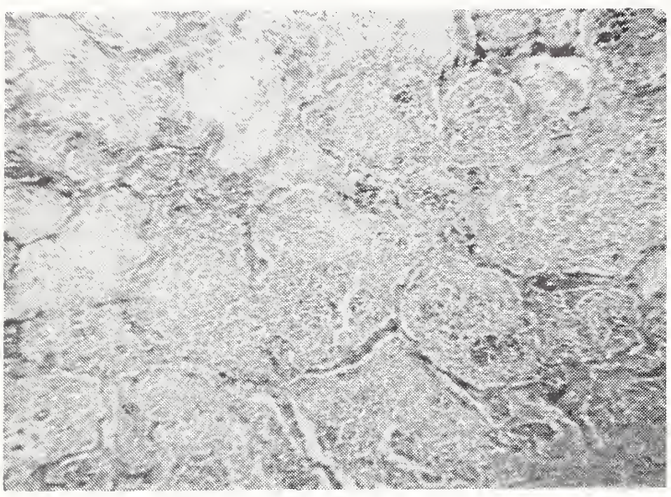


Figure 1.

carditis, the gastrointestinal bleeding which has to be more than uremic colitis and could well be higher in the gastrointestinal tract, and that uremic coma eventuated with death due to that mechanism. I do not find it necessary to include hepatic coma to account for this sequence of events."

Dr. Joel Brunson: "From time to time we have visitors here at the University Medical Center. Those of you who were here last year will remember Dr. Edward A. Gall. He is with us again and has very graciously consented to discuss this case. Dr. Gall is professor of pathology and director of the department of pathology at the University of Cincinnati Medical School and is editor of *The American Journal of Pathology.*"

PATHOLOGIST'S REPORT

Dr. Edward A. Gall: "The fact that I am here is indicative of the pleasure of my last trip. This is a rather disappointing case for a pathologist to present because he has nothing with which to refute the clinical statements.

"This patient was autopsied some 17 hours after death and at least one very accurate clinical observation was made. He was emaciated. The body when opened showed fluid in both pleural cavities. It was clear fluid, however, about 400 ml. to 800 ml., more on the left than the right. The lungs were quite heavy and there was obvious extensive pneumonia at both bases. The pericardium was unremarkable, but the heart was quite large with a weight of 550 gm.—close to twice normal weight. The myocardium was flecked with small fibrous foci, but the muscle was firm, and the valves were unremarkable. The peritoneal cavity contained 800 cc. of clear fluid.

"The liver was moderately enlarged. It weighed 1850 gm. compared to a normal weight of 1500 gm. It was said to be quite firm, the right lobe larger than the left, and there were whitish-patchy areas visible to the naked eye. There was no nodulation, however.

"The alimentary tract showed extensive erosion and esophagitis, but there was no blood beyond that point. The stomach contained about 1,000 ml. of a whitish material, but there was neither fresh blood nor tarry stools beyond this point. The spleen and pancreas were grossly normal. The adrenals perched in their normal location and had normal configuration without evidence of nodulation of the cortex. One kidney was a little smaller than normal and one a little larger than normal. They appeared pale and flecked with fine hemorrhages. Otherwise, they were not very striking. The brain did not show anything to gross examination.

"I think the photographs will illustrate the findings as well as I can describe them. Figure 1 is a photomicrograph of the lungs, which shows extensive pneumonia. Much of it was a neutrophilic reaction, but a fair amount of it has a gelatinous appearance, and there were enormous numbers of bacilli present. I had no gram stain and culture presumably was lost so we do not know what the organism was. My initial impression from some of these areas was that this could be a

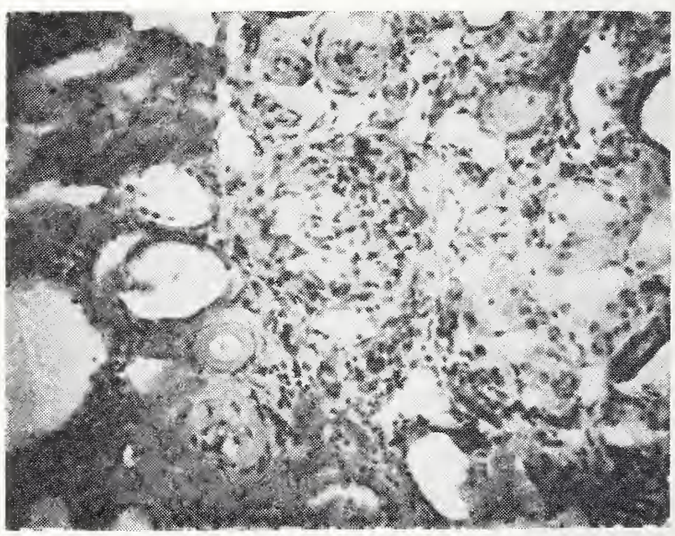


Figure 2.

Friedlander's pneumonia, but I could not establish that.

KIDNEY EXAMINATION

"The kidney was the seat of extensive scarring, but the most striking feature in it was the arterial and arteriolar sclerosis (Fig. 2). There were patches of interstitial lymphocytic infiltration, and although some tubules were dilated, they showed none of the colloid cast formation. There was little periglomerular fibrosis and strangulation of glomeruli and thus little evidence of pyelonephritis. These concentrically laminated arteries and arterioles, as you see here, are present in every field that one viewed and, in some, arteriolar necrosis was in process so this was an example of arteriolosclerosis with acceleration and a superimposed pyelonephritis of modest proportion (Fig. 3).

"Figure 4 is a high power view of one of the arteries to show the marked degree of proliferative change in the wall. In the kidneys with arteriosclerosis with acceleration, there are two hallmarks: the marked, laminated, concentric arteriolosclerosis with marked narrowing of the lumen,

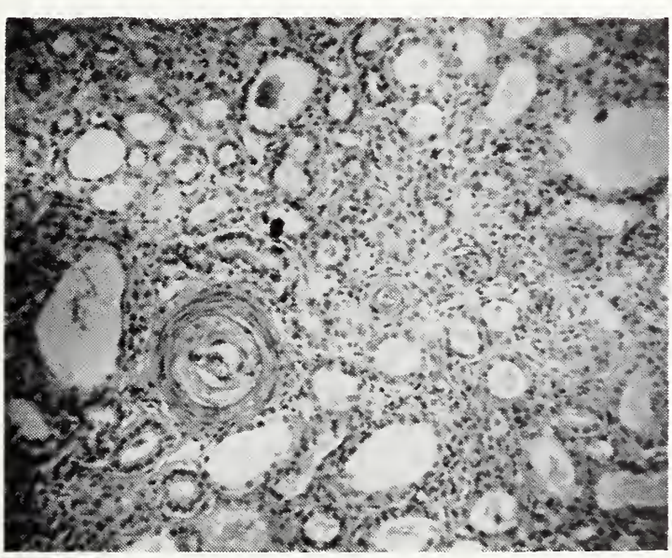


Figure 3.

and fibrinoid necrosis of arteriolar walls with even hemorrhage, but relatively little or no inflammatory reaction.

"Figures 5 and 6 show the gross appearance of the liver, and I think the description given by the prosector fits pretty well. It has this greyish appearance. The next slide (Fig. 7) shows the appearance of the portal areas or what looked like portal areas in multiple sections of the liver. Now, I call your attention to one little innocuous situation and that is a perfectly normal interlobular ductule here. All the rest of this is enlarged portal area with these microcystic spaces containing not bile but a proteinaceous precipitate. Occasionally they show a little brownish hue, but these are not

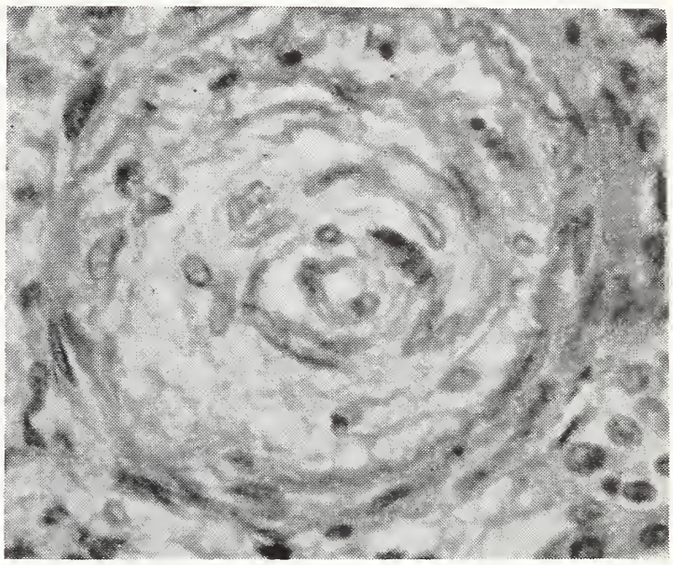


Figure 4.

the pattern that one sees in obstructive biliary disease. As Dr. Snavely indicated, this alteration goes by a variety of names but because of the distribution here in the liver I think that one would have to consider this a forme fruste of polycystic disease, or congenital polycystic disease of the liver.

"In the pancreas (Fig. 8), there were somewhat dilated interlobular ducts, and congeries of ductules around them, producing a picture not unlike that seen in the liver. However, I am inclined to think that this is a normal anatomic variant and is not an indication of polycystic disease in this organ. In addition, there was very severe arteriolosclerosis in the pancreas, and one vessel was the seat of necrotizing angiitis, a sort of secondary polyarteritis nodosa.

"Although there were no renal cysts in this case it is usual for cystic disease of the liver to be associated with a much more marked cystic disease of the kidney. We have had, however, in the last five or six years, two instances of very severe polycystic disease of the liver with only minor alterations in the kidney. These are the only two cases that we have ever seen of cystic disease of the liver associated with esophageal varices and bleeding from those varices. The pancreas frequently joins with these other two organs in that it contains many cysts of varied sizes. Ordinarily, the liver cysts do not match to any degree at all the severity of the changes in the kidney, and generally their presence in the liver is not of any

functional significance as far as the patient is concerned. In those individuals with grossly visible liver cysts there are often minor alterations of the Meyenberg type, which are very extensive in this present case, indicating an association between the two types of lesions.

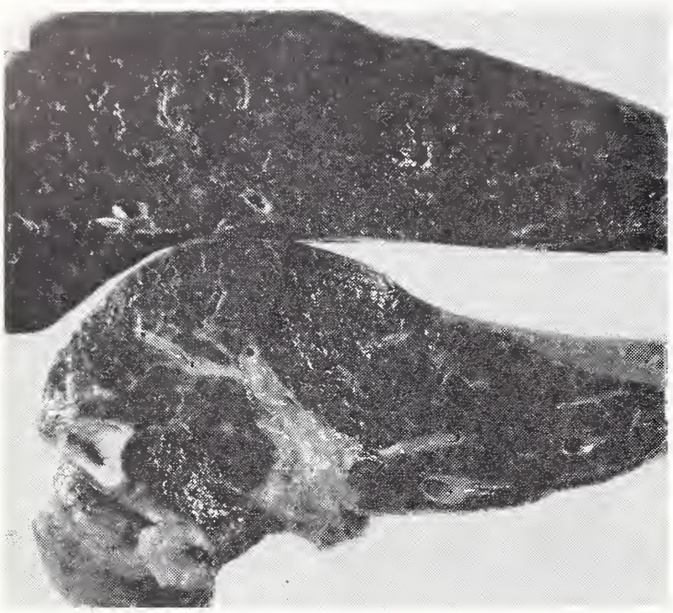


Figure 5.

"These changes are similar to those which occur in rabbits that have coccidiosis, and it seems plausible to believe that the changes may be produced by obstruction, parasitic or otherwise, although in the human cases obstructive phenomena are not demonstrated. It is quite probable that the evolution of these lesions in the liver is not unlike that which occurs in the kidney, in which there is

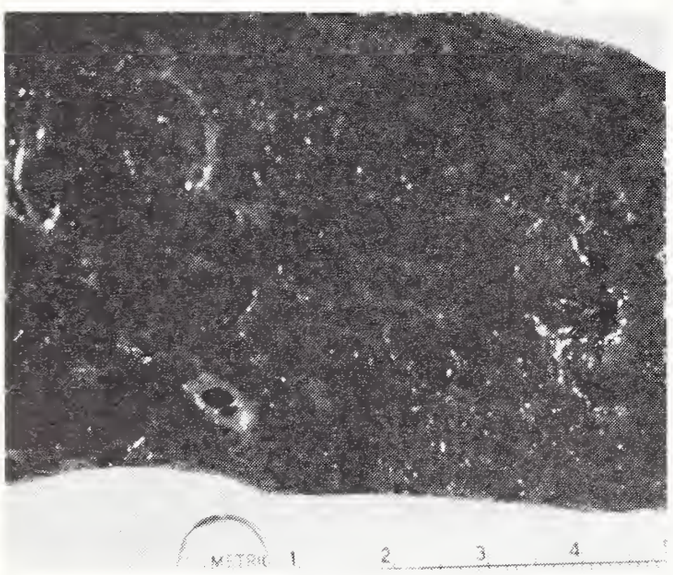


Figure 6.

actual dilatation or aneurysm-like extension from the side of the renal tubule and enlargement of this tubular aneurysm to produce the cystic ob-



Figure 7.

struction, rather than atresia or incomplete development of the nephron.

"The summary in this case then is that the patient, I believe, died of extensive lobular pneumonia, possibly Friedlander's type. The under-

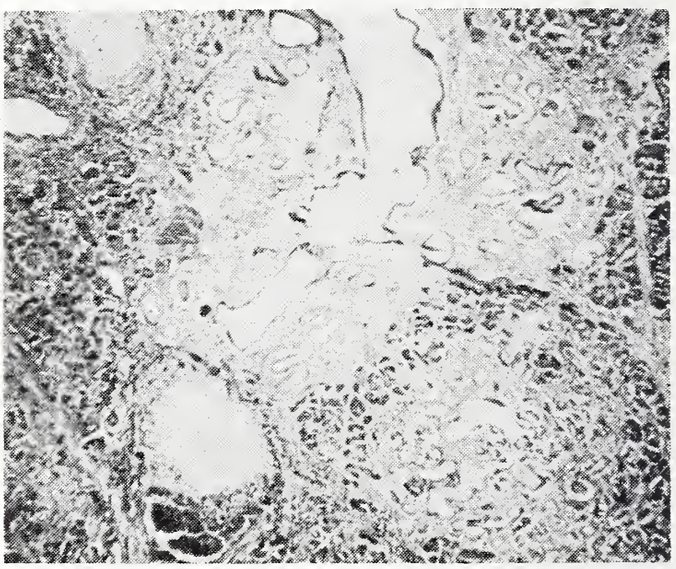


Figure 8.

lying disease was severe arteriolo-nephrosclerosis with acceleration. An incidental finding was secondary polyarteritis nodosa in the pancreas. There were then other, extensive incidental changes in the liver—a type of cystic disease, or a forme fruste of this disease, sometimes referred to as Meyenberg syndrome." ★★★

2500 North State Street

The Personal Physician—Public Health Team In Venereal Disease Control

HUBERT T. GOODMAN, M.D.
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The venereal disease cluster technique developed as an improved epidemiologic method after the house to house surveys ceased yielding early syphilis cases. Inaccurate diagnosis of genital lesions, poor morbidity reporting, and inadequate emphasis of physician participation limited the cluster's effectiveness. Venereal disease control can never be achieved unless each physician renders complete morbidity reports and permits epidemiology to be performed by public health workers. Absence of control indicates a lack of the physician's awareness of his community responsibility. The control program must provide local clinical instruction for physicians and promote the local development of laboratory diagnostic aids.

NOT TOO MANY YEARS AGO, syphilis was highly prevalent in Mississippi. The overwhelming task of controlling this disease was undertaken by the State Board of Health. Widespread surveys were conducted in many counties, and for several years teams trudged from house to house making blood tests. In the beginning, these projects proved to be an immense success and many received treatment who no doubt would otherwise have been deprived of it. Then there came an expected decline in the number of newly found cases of syphilis. Even this decline did not alter the fact that a great number of untreated cases were found and treated.

PROPHYLACTIC TREATMENT

Paralleling the mass surveys was the institution of prophylactic treatment with penicillin of the contacts of early syphilis cases. This practice was continued despite the skepticism of some of the leaders of the venereal disease control program in other states. While the advocates of prophylactic treatment demonstrated that this was a real epidemiologic tool in that it prevented many contacts from developing syphilis and further disseminating it, the opponents compared prophylactic treatment to treating the entire population without clinical evidence of an existing infection. This, the opponents contended, not only was medically unsound, but also served to mask the real problem.

During the years that the opposition continued, the effect of the prophylactic treatment program was writing history in the control of early infectious syphilis for not only Mississippi, but for the entire nation. The decrease in the annual number of early infectious syphilis cases in Mississippi became so great, as compared with states not using prophylactic treatment, that prominent figures in national venereal disease control attempted to satisfy themselves as to the efficiency and effectiveness of the Mississippi program. Finally, several of these prominent people concluded that either Mississippi was the first state to approach the successful control of syphilis or that the state was failing to locate the majority of the cases of early infectious syphilis.

SUPERFICIAL CONTROL

The greatly diminished annual morbidity reports of early infectious syphilis posed problems to the leaders of the Mississippi venereal disease control program. Though early infectious syphilis superficially appeared to be under control, the

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level of newly reported cases of latent syphilis indicated that a missing link existed in the epidemiologic program for early infectious syphilis.

CASE FINDING NECESSARY

The survey teams were still trudging up and down the roads and streets performing blood tests at every opportunity. Several years before, hosts of untreated syphilitics had been found by this method. Now the picture was different. The overall rate of reactive bloods found in the survey meant little. It was true that there were some who were receiving follow-up examinations or treatment, but it was apparent that the survey teams were not finding early infectious syphilis or preventing its spread. They were finding the cases that months or years before had been infectious. It was evident that the control of syphilis lay in the case finding of early infectious cases and the application of effective epidemiology.

Other states recognized the declining efficiency of mass surveys and began to develop epidemiologic techniques that could be used with greater effectiveness in the control of both syphilis and gonorrhea. The result of these efforts was the development of the cluster technique which was to be used experimentally in both early infectious syphilis and gonorrhea. The cluster was composed of three groups of people all of whom were environmentally related to the infected individual in such a way that they conceivably could have been infected. During an interview by a trained epidemiologic interviewer, the infected individual was asked for information concerning his sexual exposures and information concerning other people who might be infected. These groups were labelled "contacts" and "suspects" respectively. The third group, the "associates," was obtained from information that contacts and suspects gave concerning individuals whom they indicated as being potentially infected.

DEFICIENCIES IN CLUSTER

Initially, the cluster appeared to encompass the necessary facets for effective venereal disease epidemiology. Soon, however, certain deficiencies were recognized which tended to render the cluster somewhat less applicable than was originally anticipated. Gonorrhea clusters failed to yield more than an occasional new case of gonorrhea or syphilis in the suspect and associate groups. This resulted in a popularity decline as far as the gonorrhea cluster was concerned. Syphilis clusters, on the other hand, proved to be very productive, under many circumstances, and as a result became more widely accepted.

The Mississippi venereal disease control program incorporated the cluster approach as a means of finding more of the early infectious syphilis that apparently existed. The first trials demonstrated that many variables affected the success of the cluster. Errors in diagnosis, inadequate knowledge of the epidemiology of syphilis, including its overall application, and the tendency not to encourage the active participation of the physician in private practice, proved to be the major causes for clusters which were not totally successful from an epidemiologic standpoint.

TECHNIQUE REORIENTATION

A reorientation of the cluster technique was undertaken with the intent of lessening these variables. While the problem surrounding the application of syphilis epidemiology could be handled almost totally by public health personnel in the Board of Health, it became very evident that the problems concerning the diagnosis of early infectious syphilis and the development of private practice participation in the cluster would necessitate a program that would impress the importance of accurate diagnosis in syphilis and the dire need for epidemiology. A program of this nature would require a great expansion of capability in order that physicians over the state might be apprised of the venereal disease problem and the need for a greatly increased cooperative effort between those in private practice and the public health venereal disease control program. Since too few public health workers were adequately trained in this type of work, several pilot programs were initiated. All but one of these have been in operation only a short time and consequently, only a preliminary report of the program's success of this program can be given. Nevertheless, all evidence points to the indisputable fact that the majority of all of the venereal diseases cases are being seen by the physician in private practice and not in the public health clinic.

There is little doubt that the definitive answer to venereal disease control rests with the physicians who see and diagnose these infections. The problems of diagnosis are by no means easy ones. Gonorrhea may be present in either its symptomatic or asymptomatic form. In either instance, the presence of the disease cannot be proved without a culture. Unfortunately, the etiologic agent of gonorrhea is often difficult to culture from

gonorrhea contacts, even though they have been proved to be infected from an epidemiologic standpoint. The problem of accurately diagnosing gonorrhea remains unsolved because of the questionable validity of the urethral smear in suspected male cases and the gross inaccuracy of the smear in female suspects. Until that time arrives when a rapid and accurate means for diagnosing gonorrhea is available, there is no hope for controlling the disease unless each case which clinically appears to be gonorrhea is treated and interviewed in order that those sexual contacts who are infected can be located and treated.

DIAGNOSTIC PROBLEMS

Early syphilis also presents diagnostic problems since the chancres and rashes are being seen less frequently. When a chancre or rash appears, the examining physician has an obligation to rule out early syphilis. This can be done only by darkfield examination of the genital lesion, blood testing, and performing a thorough physical examination after having obtained a good medical history. Not even the most astute physician is capable of diagnosing the genital chancre as being syphilitic without the aid of a darkfield examination, since the blood serology may not be reactive until the secondary stage of the disease when it is always reactive. In those cases in which no skin lesions appear, the strongly reactive blood serology is no doubt the initial clue to the presence of early syphilis.

RESULTS OF SYPHILIS

Unlike most cases of gonorrhea, syphilis can result in many crippling manifestations and even death if the early case is permitted to remain untreated. It is important to be aware of the fact that if an untreated early syphilitic is pregnant, she has an excellent chance of aborting, or delivering a congenital syphilitic baby which may or may not survive. Within recent months two such deaths have occurred in the newborn here in Mississippi. Both of these could have been prevented if proper prenatal bloodtesting had been performed, and if the sources of the infection of these mothers had been properly reported to the health department in order that epidemiology could have been applied.

Each physician in private practice will no doubt discover that some of his hospital patients have an unexpected reactive blood serology. This indicates the great need for the serologic testing of hospital patients. It is quite conceivable that the patient, in reality, may be hospitalized because of several of the varied complaints which accompany late syphilis.

Public health must offer to the practicing physician certain aids if the venereal diseases are to be controlled. It is impractical for each physician to perform the darkfield examinations on his patients. It is practical, however, for a public health program to enable the local health department, laboratory, or hospital to have available darkfield facilities, including an individual technically trained in this technique. Facilities of this nature located in a health department must be mobile in order that the procedure can be done in the physician's office upon request.

The problem of epidemiology must be answered, almost entirely, by trained public health interviewers and investigators who realize and practice confidentiality in their work and who work with the consent and help of the physician. The physician himself usually is unable to perform this phase of venereal disease control since his practice does not permit him time enough to conduct thorough epidemiologic interviews and investigations and since his experience in this field, in all probability, is limited.

COMMUNITY RESPONSIBILITY

The physician in private practice who hesitates to report a case of syphilis or gonorrhea because he believes that morbidity reporting is a violation of his patient's confidence is failing to recognize that information of this nature may be disclosed when it prevents the confiding patient, a third party, the general public, or the physician from suffering an undue injury. The physician has much more than a responsibility to his patient. He also has a great responsibility towards the community in which he lives. Any physician who elects not to report his cases of gonorrhea and syphilis is failing to meet this community responsibility by permitting untreated cases to remain undetected. It is exceedingly difficult to know who these untreated cases are. Experience has shown, however, that these people often learn of their existing infection under conditions that are particularly distressing, such as at the time of application for a premarital certificate, during pregnancy, or at the time of a pre-employment examination.

In the past the medical care of the venereal disease patient has been directed towards the specialist. The physician in practice was perhaps reluctant to handle these infections since the public as a whole frowned upon venereal disease. Today, because of the availability of rapid therapy

and the overall decline in the venereal diseases, the specialist can no longer exist in his previous form. He now must be replaced by a physician practicing in the field of public health and readily available to help physicians over the state in handling their venereal disease problems.

DUTY OF HEALTH OFFICERS

Each health officer must acquaint himself with the administrative and clinical aspects of venereal disease control in order that he may serve to develop an even closer relationship between the physician in private practice and his health department. His ability to meet physicians' needs and answer their questions at the local level will decide in the long run whether or not his venereal disease control efforts are to be rewarded with local venereal disease control. It is to the health officer that the personal physician sends his morbidity reports. If the physicians do not have complete confidence in their health officer and his health department, they cannot be expected to want to participate in the venereal disease epidemiologic program.

The place of the public health venereal disease clinic in the modern control program must be one of clinical instruction. Its activities must be centered in a location where local physicians congregate. One may readily see that the local hospital is one possible solution to this problem. Correlation of these activities in the local hospital would permit the increasing development of venereal disease laboratory diagnostic aids in hospital laboratories which could serve the entire locality. The physician would have the opportunity to study the venereal disease diagnostic problems of their patients and as a result would learn the significance of many of the newer phases of diagnosis and treatment. In Jackson this program would also benefit Mississippi's future physicians by serving the medical students, interns, and residents of the University of Mississippi School of Medicine.

Ultimately the success of the venereal disease control program will be measured by the concerted efforts of the physicians, health officers, investigators, patients, laboratories, hospitals, and health departments, each of which has a responsibility in it. Each failure to meet a responsibility will be reflected as a defect in the dike that is being built to turn the tide of venereal disease. A weakened dike will not withstand long the ever present threat of a flood, and each flood will leave human devastation in its wake. ★★★

3029 Sullivant

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TRANQUIL BEES

The Pharmaceutical Manufacturers Association reports that an Ohio woman who keeps bees feeds them tranquilizers in sugar water. Result: Calm, happy bees that don't lose their tempers—and don't sting.

Carcinoma of the Cervix: Diagnosis and Evaluation

MICHAEL NEWTON, M.D., and KARL A. BOLTEN, M.D.
Jackson, Mississippi

Thousands of women in the United States die from carcinoma of the cervix each year. Unfortunately, a large percentage of the victims show no symptoms until the carcinoma has spread intensively. The authors discuss present diagnostic methods and treatment. They also report how the diagnostic studies are evaluated on the Pelvic Cancer Service at the University of Mississippi Hospital. Finally, they emphasize the importance of the cooperative approach to the work-up of these patients.

CARCINOMA OF THE CERVIX is still an important disease. In 1956, for example, 38,000 women developed cancer of the female genital tract in the United States and, during the same year, 14,784 women died from this cause. Carcinoma of the cervix was responsible for the majority of these cases.

Recently, new methods of early diagnosis have been developed. If widely used, these can reduce the deaths from this disease. New emphasis is also being placed on adequate pretreatment evaluation. This minimizes the possibility of treatment failure and helps insure that the patient will be better able to tolerate her therapy. The following comments indicate how this newer knowledge may be used effectively.

EARLY DIAGNOSIS—IMPORTANCE

Detection starts even before symptoms are present. When the carcinoma is limited to the surface epithelium of the cervix (intraepithelial carcinoma), over three quarters of the patients have no symptoms. In these cases the unicentric, or more often multicentric foci, are inconspicuous. Mere change of "character" in the epithelium is not visible on gross inspection and is rarely responsible for symptoms. At this stage the disease is virtually 100 per cent curable. Even when the carcinoma has become invasive and has spread into the deeper tissues of the cervix or beyond, about one-third of the patients are still asymptomatic. And yet, at this stage, half of the patients will be dead of the disease within five years after the diagnosis is made.

From the Department of Obstetrics and Gynecology, University of Mississippi School of Medicine.

ATTITUDE OF PATIENT AND PHYSICIAN

Patients should be educated to report the occurrence of the chief symptom of carcinoma of the cervix, irregular vaginal bleeding between the menstrual periods or after the menopause. More than this, however, they should be taught the importance of regular examinations in the interest of early detection. A suggested scheme is that these be done annually on all women over 25 years of age and on women below that age who have borne children. For his part, the physician should include a pelvic examination in the physical examination of women of this age. Further, he must be prepared vigorously to encourage regular check-ups.

PELVIC EXAMINATION

An unhurried and complete pelvic examination is of great value. Properly done this includes, first, inspection of the external genitalia and examination of the cervix through a speculum. Then

a bimanual vagino-abdominal examination is gently but thoroughly performed. Finally, a recto-vagino-abdominal examination is done, i.e. the anal canal, rectum, rectovaginal septum and cul-de-sac are palpated and possible para-cervical thickening detected.

DIAGNOSTIC TECHNIQUES

Proper use should be made of all the aids which are now available for diagnosis. These include:

1. **Cytologic Studies.** These are of first importance as a screening method. The technique is simple. Material is aspirated from the vaginal vault or scraped from the cervix (using an Ayre Spatula). It is then spread on a slide and fixed immediately (before drying) in equal parts of ether and 95 per cent alcohol. The slides may then be taken directly to the laboratory or may be mailed in appropriate containers. Slides are usually stained by the technique originally described by Papanicolaou, but newer and faster methods such as fluorescent cytology with the use of acridine-orange are being evaluated and may prove to be of great value. If cytologic studies are performed at the time of the annual check-up examination, and if the slides are processed and read by competent cyto-technicians and pathologists, many more early lesions will be diagnosed and treated. It must be remembered that a cytologic diagnosis is only tentative. Confirmation by biopsy is essential before treatment is begun.

2. **Colposcopy.** Increasing interest has been shown recently in this country in colposcopy.[1] It has been popular for many years in Europe but rarely used in the United States. Using an ordinary speculum in the vagina and with the colposcope mounted on a stand outside the external genitalia, the surface of the cervix may be viewed at a magnification of 10 to 20 times. Frequently painting the cervix with special iodine solution (Schiller test) may be helpful in conjunction with colposcopy since it may delineate suspicious areas. Characteristic premalignant architectural changes have been described in the cervix by these means. At the University of Mississippi Hospital colposcopic examination is performed routinely on all patients at their first visit to the gynecological clinic. Its greatest value appears to be that it enables spot biopsies to be taken from suspicious areas on the normal-appearing cervix. Thus the frequency of extensive cold-knife conization may be reduced.

3. **Biopsy.** The time-honored technique of local punch biopsy of the cervix is still of great value. When a definite localized lesion is visible on the cervix, one or more pieces of tissue may be removed in the office with little discomfort to the patient. With increasing use of the colposcope, spot biopsies may become even more important.

4. **Cold-knife Conization Biopsy.** This is a procedure which requires hospitalization and anesthesia. By it, a cone shaped piece of tissue is removed which includes ectocervix, squamo-columnar junction, and endocervix. A knife should be used rather than the electric conization wire, since the latter burns the tissues and increases the difficulty of making an accurate microscopic diagnosis. Cold-knife conization has its greatest value when cytologic or other evidence points to a possible malignant lesion but either there is no obvious area to biopsy or biopsy is inconclusive. It is also important in ruling out the presence of invasive carcinoma when an intraepithelial lesion has been previously diagnosed by punch biopsy.

PSYCHOLOGIC PREPARATION

The physician who makes the diagnosis of carcinoma of the cervix has the responsibility for seeing that his patient is appropriately informed of her difficulty and that she is directed to a place where she can receive adequate treatment. He has two problems. First, should he inform the patient of the exact nature of her disease? Second, should he tell her exactly what treatment to expect?

Much has been written as to whether a patient should be told that she has cancer or not. No blanket rule can be given. It is certainly true that the patient who knows what she has is much more likely to accept the hardships of treatment and return faithfully for follow-ups. On the other hand, harm can occasionally be done by the bald, unmodified statement to the patient that she has cancer. It would seem better to give the patient every opportunity to ask questions about her condition. If she asks directly whether she has cancer, she should be told the truth, although at the same time the early stage of the disease and its curability should be emphasized. It goes without saying that, whether or not the patient is told of the nature of her disease, her family should be fully informed.

Since there is more than one method of treatment of cancer of the cervix, and even within different methods, such as radiation or surgery, there are many different techniques, it may cause confusion for the physician who makes the original diagnosis to go into the details of specific treatment with the patient, unless he is personally going to supervise it. He can, however, indicate the possibilities and their general nature. As a corollary, even the physician to whom the patient is referred for treatment, may be ill-advised in the first instance to state the exact method to be used.

This is because the diagnostic workup may reveal additional spread of the disease or associated conditions which may alter therapy.

EVALUATION—DIAGNOSTIC STUDIES

When a patient has been found to have intraepithelial carcinoma of the cervix and invasive carcinoma has been excluded, additional diagnostic work-up is not usually necessary. Treatment may be commenced promptly, although in doing so, it should be remembered that focal areas of involvement in the vaginal cuff occur in about six per cent of cases. On the other hand, if invasive carcinoma is present, further investigation is essential. It is often appropriate that this be conducted in hospital in an intensive manner, but can be performed on an outpatient basis.

The aim of all studies in carcinoma of the cervix is to determine the extent of the disease, as far as possible, and to provide a baseline for post-treatment studies. Both of these objectives are important, the latter particularly so since any form of adequate treatment for carcinoma of the cervix may cause changes which need evaluation later.

On the Pelvic Cancer Service at the University of Mississippi Hospital, in addition to a complete history and physical examination, a complete blood count, serology, and clean-catch urinalysis are performed. If a urinary tract infection is present, a culture is taken from a catheterized specimen of urine. A blood urea nitrogen and fasting blood sugar are obtained. The latter is done because patients with diabetes may respond less well to treatment. Total serum proteins are determined, because the nutritional state of the patient is important in considering therapy. The urinary tract, often involved in carcinoma of the cervix, is studied by means of an intravenous pyelogram and usually by cystoscopy. The lower intestinal tract is studied by proctoscopy, but a barium enema is rarely performed. A routine chest x-ray and electrocardiogram are also obtained. When surgical treatment is contemplated, complete coagulation studies are performed to obviate the unexpected finding of a coagulation deficiency. Appropriate consultants are used as indicated.

TABLE I

CARCINOMA OF THE CERVIX

Staging

STAGE 0. Intraepithelial, preinvasive, in-situ carcinoma.*

STAGE I. The carcinoma is confined to the cervix.
- M. Microcarcinoma.**
- A. Carcinoma less than 1 cm. in diameter.†
- B. Carcinoma more than 1 cm. in diameter.

STAGE II. The carcinoma involves the vagina but not the lower third. The carcinoma infiltrates the parametrium but has not reached the pelvic wall. The carcinoma extends to the corpus.
- A. Carcinoma encroaching upon the vaginal wall or involving the corpus but not obviously infiltrating the parametrium.
- B. Carcinoma infiltrating the parametrium.

STAGE III. The carcinoma involves the lower third of the vagina. The carcinomatous infiltration of the parametrium has extended into the pelvic wall when on rectal examination the infiltration feels firm and nodular and there is no smooth cancer free space between the tumor and the pelvic wall. A swelling on the pelvic wall, not attached to the tumor, should not be considered in the staging.

STAGE IV. The carcinoma involves the bladder or rectum, or has extended outside the true pelvis, i.e., below the vaginal inlet or above the pelvic brim (distant metastasis).
- A. Clinical invasion of the bladder or rectum.
- B. Histologically proved invasion of the bladder or rectum, ulceration, or fistulas. Extension of the carcinoma outside the true pelvis.

STAGE V. Carcinoma inadequately treated or recurrent after treatment.
- A. Carcinoma inadequately treated.
- B. Carcinoma recurrent after adequate treatment.

* Borderline or questionable invasion is regarded as intraepithelial carcinoma.

** Microcarcinoma is diagnosed when invasion of less than 5 mm. through the basement membrane is seen in one area only on semi-serial sections from a cone specimen (70-80 per cent preclinical).

† May be preclinical.

COMBINED PRETREATMENT EVALUATION

Following the above studies, the patient is carefully evaluated by those who will be supervising her treatment. Most appropriately, this may be done by a gynecologist and a radiologist. The object of this evaluation is to determine the effect on treatment of the general medical condition of the patient and her socioeconomic status and emotional state. Next, careful clinical staging of the extent of her disease is performed and considered together with any additional information obtained from the studies. The International system is widely used for clinical staging. Table I shows the modification of this which is used on the Pelvic Cancer Service at the University of Mississippi Hospital (adopted with slight variations from that described by Blaikley *et al.*[2]).

Clinical staging is not ideal because it does not take into account the differentiation of the tumor on pathological examination nor of any possible metastases to lymph nodes. Nevertheless, it is a valuable guide to treatment and prognosis. It is extremely important that all those who are to be concerned with the patient's treatment stage her so that a firm opinion of the extent of disease may be obtained. Although it is generally true that experienced examiners will agree on the stage of a particular lesion, it is frequently helpful to have more than one opinion. Finally, after consideration of all the above factors, a decision as to the best type of treatment for the individual patient is reached.

SUMMARY

1. The principles of diagnosis and evaluation for carcinoma of the cervix are presented.

2. Adequate use of all diagnostic methods including cytology, colposcopy, spot biopsy, and cold-knife conization is stressed.

3. The psychologic management of the patient is briefly discussed.

4. The performance of adequate pretreatment studies either in hospital or as an outpatient is emphasized. This serves to delineate the extent of disease, determine the patient's general condition and provide a baseline for post-treatment studies.

5. Thorough combined evaluation of the patient by all those concerned with her treatment, as performed on the Pelvic Cancer Service at the University of Mississippi Hospital, is described. This consists of a consideration of the extent of her disease, as determined by clinical staging and appropriate studies, and of her general condition, including medical, socioeconomic and psychologic factors. A result of this, an appropriate decision as to treatment is reached, based on the needs of the individual patient.

6. The importance of the cooperative approach to the work-up of patients with carcinoma of the cervix is emphasized. This enables the best specialized technique of treatment to be adopted for each particular patient and encourages her to accept and follow through with her therapy more satisfactorily. ★★★

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INTELLIGENCE REPORT

British scientists, out to prove whether there is a difference in the basic intelligence of men and women, have come up with this finding: The proportion of men below an IQ of 80 is five times as great as women. But there are nearly five times more men than women with IQs above 120.

Let's Get the Picture Back in Focus

E. VINCENT ASKEY, M.D.
Los Angeles, California

Speaking before a medico-civic audience of Natchez physicians and club members, Dr. Askey attacked what he termed "two of the most popular myths about our aging population." According to Dr. Askey, these are that "all old people are sick and in need of help" and that "all old people are in serious financial difficulty." He pointed out that, at the most, only one out of every 16 persons over 65 has illness that hampers him significantly, and that a great number of the elderly are financially stable. Dr. Askey said he has found in his practice that retired elders yearn for involvement more than money, health, or anything else. He said that AMA supports and promotes an approach to the problems of the aged that will provide healthful, purposeful living for all older people.

THE MANY PHYSICIANS FROM MISSISSIPPI whom I have come to know and respect are all typical of a breed of man that I hope will not vanish from the American scene. I refer to those men who are known as responsible, rugged individualists . . . the men who do not demand all kinds of assistance the moment things do not go right . . . those men who feel that they themselves have the obligation and the responsibility of taking care of themselves and their families . . . those men who know and treasure the value of living and dying free men.

My trip to Natchez so far has convinced me that there are still many citizens who fall into this category and who are sufficiently concerned about the well-being of their nation, not just for today but also for tomorrow. Yes, I like the outlook on present-day life as it has been expressed to me many times from people of this region. They have said to me:

"We prefer to be men, not robots. Don't make problems of us; don't give us planned lives blueprinted in Washington. Don't give us a meaningless life of comfort and security that is devoid of freedom.

"We are proud people . . . with courage, with strength, with know-how and with unbounded potential for choosing rightly and working diligently in all matters that affect us as individuals, as citizens, as families, as communities, as states and as a significant portion of that land we live in."

Too seldom does our federal government recognize this attitude and energy in the American people. Too often it looks to minor weaknesses—stressing them and overstressing them to the point that problems of the individual, his family, community, or state are blown up into so-called great national issues. In recent years this approach has touched and involved our older citizens and the medical profession. Today the federal government wants to make "problems" of the senior citizens; they want to plan their medical care; they want to make all these older persons dependent upon all the younger taxpayers.

Is this what the retired segment of our population wants? Are they all so destitute that the federal government has to force all the young and the future young to finance medical care for all

President, American Medical Association.

Read before a special meeting of the Homochitto Valley Medical Society and the civic and service organizations in Natchez, Mississippi, March 28, 1961.

the elderly today and forever? Are old people interested exclusively in serenity and security in their later years?

A DESIRE FOR INVOLVEMENT

As a physician who knows many, many older persons intimately. I believe that some Americans have the senior citizens all wrong. I think that our retired elders yearn for *involvement* more than money, health, or anything else. They desire to be wanted by you and their fellow Americans; they want to remain useful; they want to be important to others. They certainly do not want to be set apart. I am convinced that serenity and security in old age lead directly to surrender, and surrender in life is the beginning of the end of life. As a physician, I value and promote in my older patients the pursuits of happiness and the will to live.

65—NO GUARANTEE

Sixty-five years of age never was a guarantee for happiness. At any age happiness requires pursuit, and I encourage my patients to pursue it constantly and vigorously. Sixty-five years of age likewise was never a guarantee for an automatic number of years beyond retirement. Patients, young or old, must have a will to live. They must have purpose and importance to their lives. Without these the older person quits, throws in the sponge, and lives out his life much like a condemned prisoner.

If I as a physician could have one wish fulfilled for older people today, it would be that our society could be rid of all the nonsense that accompanies the attainment of age 65. Here I definitely include all the foolishness about compulsory retirement, about vocational uselessness, about limited hours of work and limited earnings, about supposed lost of brainpower and energy, about senility and declining health, and about the necessity of serenity and security.

RESHAPING OF ATTITUDE

We in the American Medical Association are dedicated to the proposition that the attitude of society, communities, and individuals must be reshaped so that everyone understands the importance of self-reliance, responsibility, the will to live, and the pursuit of happiness among our increasing aged population. Furthermore, we stress the importance of the maintenance of health of all our aged. For those who are disabled or sick, we pledge our fullest resources to the improvement of their health. For those who are well, and there are many millions, we also pledge our fullest resources to keep them that way.

Here today I would like to predict that we in medicine will shortly help to make age 65 look like 40 now does. Yes, the prospects for longer life continue to brighten and soon 65 may be merely that milepost in life just beyond the midway mark. But still this great nation loses a great deal of its best manpower and brainpower to arbitrary retirement and joblessness at 65. Still we try to provide serenity and security to young old people who would rather have *involvement, challenge* and *opportunity.*

TWO POPULAR MYTHS

While more and more old people are thinking young, society and government continue to think old. Two of the most popular myths about our aging population are: 1. All old people are sick and in need of help, and 2. All old people are in serious financial difficulty. What are the facts? Well, one University of Chicago sociologist found that at the most one of every five persons over 65 is sick to a degree which significantly limits his normal activity. And about two-thirds of the persons who were ill said that their illness had interfered in no way with their normal mode of behavior. Thus, only about one out of every 16 persons has illness that hampers them significantly.

CONFUSION OF TERMS

Of course, those who are advocating a program of federal medical care for all persons over the age of 65 through Social Security contend that 75 per cent of the aged have some chronic condition. This is true. However, it is also true that 61 per cent of this group has *no limitation* or *only minor limitation* of their normal living activities. Remember that a chonic ailment must not be confused with a disabling ailment. It is a fact that among the total U. S. working population almost half has some chronic condition. No one is suggesting that this is a national health crisis. Why then should chronic ailments among the older population be so considered?

But you might ask: Isn't there great truth in the contention that the older population is dismally poor? I say "no," not as a whole group of 16 million. Just last week, one economist said that of the 16 million elderly "half of this group maintained their own households, subsisting on

money incomes of less than $900 a year. And 83 per cent had less than $2,000 a year."

WHO'S MISLEADING WHOM?

This sounds like the situation truly is a tragic one. However, notice that the economist says that "half of this group" subsists on money incomes of less than $900 a year. This is misleading, for it can be said of most of any group—young or old—that half make less than $900. In fact, usually half in the group earn nothing at all because they are housewives. You know it's a funny thing, but do you know who has been charged with misleading and misinforming the American people on the issue of medical care for the aged through Social Security? The American Medical Association. And yet I see and hear distortions, falsehoods, and half-truths about this issue of the aged and about the AMA almost daily.

THE UNMENTIONED FACTS

But on this matter of financial status of the aged, I want you to have as much of the picture as possible. What the proponents of Social Security medicine don't tell you is that:

—More than 10 and a half million aged receive Social Security checks.

—More than a million get veterans' pensions.

—About a million receive railroad or civil service pensions.

—Some one and a half million receive cash benefits from private pension plans.

—Four million are employed, or are wives of employed persons.

—One million receive annuities that are privately purchased.

—About half the aged have income from rents, dividends or interest.

—Almost three out of every four couples drawing social security benefits own their own homes, about nine out of 10 of them mortgage-free.

—The median net worth of social security oldsters has risen 71 per cent during the six-year period from 1951 to 1957.

—The liquid assets of persons over 65 are the highest in *any* age group and have increased the most rapidly.

—Those over 65 have the lowest indebtedness of *any* age group.

On top of all this the tax structure is more favorable for older persons; living costs are less; children and relatives usually become assets rather than financial obligations, and more than half of the Americans 65 and older now have health insurance protection. And by 1970, it is estimated that 90 per cent of those who want and need such protection will have it.

I am not trying to tell you that all old people are millionaires—far from it. I am saying that all old people are not sick and dying, downtrodden and poor. Some are. This we know. In fact, two and a half million are on old age assistance, and an undetermined additional number, although able to finance other living costs, find it almost impossible to withstand the additional burden of the cost of illness.

FEWER 'NEEDY'

Even here, however, the picture is not entirely black. The percentage of persons over 65 who are "needy" has been declining constantly. In 1950 some 22 per cent of all aged received old age assistance. In 1959 this declined to 15 per cent. And by 1970 the figure should drop to 11 per cent. This sharp, continuing reduction of the percentage of needy aged reflects the improving economic status of this particular age group. The economic status of others in the older age brackets also should improve steadily over the years. Why? More and more persons will enjoy private pension plans; more will receive annuities; more will receive social security checks; more old people will work longer.

For those oldsters in need of financial help to pay for their medical care Congress last year passed the Kerr-Mills Medical Assistance for the Aged bill. The American Medical Association wholeheartedly endorsed this measure of federal-state matching funds to be administered at the local level to older persons in need of help. This new law makes it possible to provide *any* and *all* medical services to the older person, whether he is on the social security rolls or not, if he is in need of this kind of assistance. It does not make the mistake of trying to provide medical care for everyone over 65, regardless of their financial resources, with the fantastically costly total national bill to be paid by the younger taxpayers.

SOCIAL SECURITY MEDICINE

Social security medicine for the aged also would be an irreversible federal law whereby taxpayers would be footing the bill for more and more people every year—and probably at higher tax rates every year. But the Kerr-Mills Act gives the nation an opportunity to help those who really need help, and yet at the same time we can work toward the economic betterment of these recipients with the hope of reducing the number that need help.

For example, suppose that next year under the Kerr-Mills Act the 50 states were to help four million needy persons with the financing of their medical care. I sincerely believe that society could reduce this number over the years by working with these people and the new entrants into the older age brackets. By reducing inflation, by providing more jobs and pensions, and by helping in other ways, society and the free enterprise system can help the needy to become financially independent of government. And society can help itself to lower taxes.

Under social security medicine the opposite would be true. If passed by Congress, Social Security medicine would cover approximately 11 million aged persons. Medical care coverage, however, would be limited under the present proposals. But two things are inevitable: 1. The number of persons receiving Social Security assistance would increase over the years by several millions, and 2. The medical care benefits would undoubtedly be expanded and liberalized. Both of these would increase the taxes that all younger workers and employers would pay. The measure therefore would be a two-barreled bureaucratic scheme of *giveaway* and *takeaway!*

GROWTH OF INCOME TAX

If anyone here doubts that this kind statism and taxation is irreversible and mushrooming, I recall for you the situation back in 1909. At that time Congress was considering an income tax of a flat 2 per cent on all earnings over $4,000. Two per cent didn't sound like much, just like one quarter of 1 per cent for employee and employer on the first $5,000 income doesn't sound like much for social security medical care for the aged today. As a result, few voices were raised against this seemingly small 2 per cent income tax rate back in 1909.

However, some alert congressmen did think it would be well to put a top limit of 10 per cent on the income tax. But this was considered ridiculous by Congress and was rejected with these words: "If we did that, some day some damn fool might try to raise it that high!"

With April 15 only a few weeks away I don't have to say anything further.

I do remind you, however, that the original architects of Social Security envisioned a top limit of 6 per cent (3 per cent each for employe and employer) on a tax base of $3,000. Already this top limit on the tax has been reached; already the top limit on the tax base has been surpassed and the base is at $4,800. And it is going higher . . . 7 per cent in 1963, 8 per cent in 1966 and 9 per cent in 1969. And already there are proposals that the tax base be raised as high as $7,500.

SUMMARY

In summary, I believe:

1. Medicine and its allies on the health team will continue to improve the health status of our aging population. More people will live more years after 65 free of serious and disabling illness. They will enjoy these added years because medicine can, and will, do more for them.

2. The economic status of our older citizens will improve steadily, and fewer persons will be dependent on government or their children for assistance.

3. All those in retirement eventually will be able to purchase voluntary health insurance coverage to protect themselves against the cost of illness—short-term, long-term, or catastrophic. They will have a true insurance policy with a contractual arrangement between themselves and the insurer to pay their bills. They will not have to rely on the whims of Congress or upon the willingness of younger taxpayers to support them.

4. Massive federal intervention into the medical care field is the wrong direction, for it *gives* to all over 65 regardless of need while *taking* from all regardless of their own obligations of family, shelter, clothing, food, and education. This kind of approach provides no "out" in the future for the taxpayers and the national economy.

Furthermore, Social Security medicine is the stepping stone to full-blown socialized medicine in this country. The Socialist party itself just recently stated that the current administration proposal for Social Security medicine "paves the way for socialized medicine." This proposal and socialized medicine, the party publicly states, will be the springboard to reach that bigger prize—full socialism for the United States.

5. The Kerr-Mills Medical Assistance for the Aged Act now provides a workable solution to the problem of helping the aged in need of financial help for medical care. And it gives our nation that all-important "out," namely a chance to improve the financial lot of the needy so that perhaps some day our government can reduce substantially these kind of payments.

Thus, all this leads me to conclude that the so-called crisis in aging already has reached its

peak, and now through new private insurance programs, better pensions, improved health facilities for the aged, new home care methods, a change in society's attitude toward the aging, good nutrition and healthful living, and help for those who really need help we can all build a structure of healthful, purposeful, living for our older people.

This is the kind of progressive, enterprising approach that the A.M.A. supports and promotes. We hope you do too! ★★★

2210 West Third Street

HYPNOTIC HUBBIES

Newest hypnosis theory is that husbands should be taught how to hypnotize their wives during childbirth. Dr. Abraham Sinclair-Gieben of Scotland's Aberdeen University, who came up with this proposal, says that a hypnosis-trained husband can make childbirth easier by mesmerizing his wife into a state of relaxation during the birth process.

The American Psychiatric Association has vigorously denounced this theory. In a recent warning to the public and the association's 12,000 members, an APA committee said, "Whoever makes use of hypnosis should know enough about psychiatry to know when hypnosis would be actually dangerous to the patient."

The committee opposed the current fad of "quickie" courses in hypnotism given by persons with no medical training who teach pupils only how to put a person into a trance. The APA is putting pressure on local medical societies to impress their members with the need for prolonged training in medical schools by qualified hypnotism experts.

"Physicians practicing hypnosis should do so only in their particular field of competence," the committee said. They also emphasized the need for continued research on hypnosis and its place as a tool in medicine.



The President Speaking

'With Heartfelt Thanks'

G. SWINK HICKS, M.D.
Natchez, Mississippi

THESE ARE THOUGHTS which have probably occurred to a Mississippi physician annually during the past 104 years—meaning, of course, the thoughts of a president of our association about to retire. At the 93rd Annual Session, your president will endeavor to account for his stewardship, but this final page is something more personal.

No Mississippi physician need be president of our association to realize that it's not a one man show. MSMA is a team and a dedicated team playing an important game every day. Toward that end, any president has much for which to be grateful and many who merit his deepest gratitude. This is such an expression.

To my fellow officers, those who worked so diligently, sometimes without sufficient recognition or credit, my grateful and sincere expression of "well done" and thank you each and every one. To the Board of Trustees, nine able, competent men whose responsibilities for the management of our association's affairs and policies are almost beyond belief, my admiration and gratitude.

To each elected council member of the nine specialized bodies of our House of Delegates, thank you for performing so well in the discharge of your sometimes difficult duties. And the committee members, numerous but active, often nameless but hard at work doing tasks, finding facts, searching to write a single line of recommended policy which may solve a difficult medical problem, thank you, too.

And no such expression would be even partially complete without an accolade to the Woman's Auxiliary, respectively dear to physicians as life companions and organizationally our sisters in a good work. To every auxiliary member, thank you. To our component medical societies, their officers—especially the hardworking, unsung heroes, the secretaries—and each member, thanks to you.

And a final word to our Central Office Headquarters staff, eight people in the service of Mississippi medicine who are willing to work without watching the clock or, for that matter, the calendar: Thanks to each of them.

The 1960-61 association year has but a week to go as we enter our 93rd Annual Session. Great preparations have been made for every member of our medical family through careful planning, the best possible programming, and the organization of special events of interest to all. If you'll be at Biloxi, this expression will be personally conveyed with a special thank you from a very grateful president speaking. ★★★

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EDITORIALS

The King Bill: Hoax, Deception, Fraud

"If we can only break through and get our foot inside the door, then we can expand the program after that."

—Aime J. Forand
Former Member of Congress
Rhode Island

I

Suppose a member of the Congress introduced a bill to provide federal fire departments for certain sizes and classes of cities in the United States. Further, say it provides that only so much fire protection will be given, only such and such a portion of a burning structure may be extinguished, and that each fire department may save only a maximum number of persons from a building about to be consumed. And top off this supposition by stipulating that everybody in every city will pay a new and additional federal tax for this extravagant, unneeded, yet inadequate service, whether they need and receive the service or not. If such a bill were introduced in the Congress, the sponsor would be tarred, feathered, and ridden out of Washington on a rail yet this is exactly what has been proposed in the name of health care of the aging.

Representative Cecil King, a liberal Democrat from California and second ranking majority member of the House Committee on Ways and Means has introduced H.R. 4222, this season's version of Forand-type legislative proposals, with the sponsorship and blessings of the AFL-CIO, the Kennedy administration, a majority of social welfare organizations, and a few really lunatic fringe outfits not the least of which is the Socialist Party of America. In the Senate, New Mexico's Clinton P. Anderson put up S. 909, a carbon copy of the King proposal.

The King-Anderson proposal is a hoax, deception, and fraud of monstrous proportion upon every American. It is grossly extravagant; it is totally unneeded; it would socialize medicine in the United States; and if enacted, it wouldn't do the job it claims to be able to do.

II

H.R. 4222 proposes four categories of limited health services to the aged under the Social Security Act. These are:

—Up to 90 days of inpatient hospitalization subject to payment by the patient of $10 per day during the first nine days with a $20 minimum payment.

—Up to 180 days of skilled nursing home services immediately following hospitalization but with a limitation upon the actual amount provided subject to total inpatient days used.

—Home health services up to a maximum of 240 visits during a calendar year by a homemaker service, intermittent nursing service, or nonprofit home health service.

—Outpatient hospital diagnostic services subject to a minimum payment of $20 for each complete diagnostic study.

Payment to physicians is excluded except for services of anesthesiologists, pathologists, radiologists, and physiatrists but would include services by residents and interns in approved training programs. A minimum of 90 days would have to elapse between periods of illness so treated. The services would be available only to persons whose incomes had been taxed under Social Security and who are age 65 or over.

III

The measure is a hoax because it is an empty box labeled full. It offers benefits to those who, for the greater part, need no help with health care. It would not help those who are really in need and because they are in a distinct minority, local programs of care for the indigent offering complete services without limitation, without federal controls, and without phony labels are all that is required. In effect, H.R. 4222 says that everybody over 65 is sick, senile, and dependent and can't afford health care. This simply isn't so and here's why.

Of the 60 per cent—nine and a half million—of the nation's 16 million over-65-group receiving Social Security cash benefits, 1.5 million receive pensions under private plans; a million get veterans pensions, too; another million receive railroad or civil service retirement pensions; four million others are gainfully employed; and still another million are enjoying privately purchased annuities. Their median net worth today is almost $10,000 each, an increase of 71 per cent in 10 years and seven out of 10 such persons own their own homes. Three out of four have liquid assets and the entire over-65 age group has the lowest indebtedness of any other. Many are extremely wealthy, many are extremely poor, but most are in between, able to haul their own freight.

But Section 2 of the bill blatantly states that ". . . The Congress hereby finds that the heavy costs of hospital care and related health care are a grave threat to the security of aged beneficiaries, most of them are not able to qualify for and to afford private insurance adequately protecting them against such costs, many are accordingly forced to apply for private or public aid, accentuating the financial difficulties of hospitals and private or public welfare agencies and the burdens on the general revenues, and it is in the interest of the general welfare for financial burdens resulting from hospital services and related services required by these individuals to be met through social insurance."

IV

The proposal is a deception because its real purpose is hidden away beneath the ribbons and bows of counterfeit concern for the aging. Here are the exact words of R. W. Tucker, chairman of the Socialist Party's committee on medical economics, written in *New America,* the party's official publication: "Once the Forand bill is passed, this nation will be provided with a mechanism for socialized medicine, capable of indefinite expansion in every direction until it includes the entire population . . ."

You didn't invent the phrase "socialized medicine," doctor. *They* did!

Hear the words of Walter Reuther, president of the United Automobile Workers: "It is no secret that the UAW is officially on record as backing a program of national health insurance . . ." But Mr. Forand, the mild mannered man from Valley Falls, Rhode Island, who carved his niche in history the hard way, was most forthright of all. He said simply that he wanted to get his foot in the door and take it from there.

V

The King bill is a fraud—67 pages of contradictions, pious promises, and unctuous guarantees—a legislative con game with America's taxpayers as soft marks. To begin, it offers benefits to four out of five persons who don't need them at the expense of all taxpayers below the age 65 level. On page four, it "guarantees" free choice of physician and hospital ". . . without the exercise of any federal supervision or control over the practice of medicine by any doctor or over the manner in which medical services are provided by any hospital." On page 26, it takes it away by requiring federal contracts with providers of health care and the circumstances under which such contracts may be discontinued.

It claims to increase the Social Security tax by only one-fourth of one per cent but the fifth grade arithmetic book says that a jump from $288 to $325 per year is about 13 per cent. And that's only the first year.

Well hidden under sections and subsections of legal gobbledygook is the fact that not a single benefit would become available until October 1,

1962, if the bill were enacted tomorrow and nursing home care would not be authorized until July 1, 1963, but taxes would be collected all the while at the new rate. And that's not the half of it, either, because the Social Security tax—over and above federal income tax—is already set for a hike to 9 per cent in eight years. It even ties in benefit payments with Canadian socialized medicine for those under the Railroad Retirement Act.

VI

Let the proponents slice this social welfare proposition any way they like but its true nature can't be concealed. It's a hoax, a deception, and a fraud by their own declaration and admission. It will not help any aged person medically or financially. It will bankrupt the nation, socialize medicine, and bring about poorer health care for all. Eventually, a law of this nature would supplant and destroy voluntary prepayment and health insurance. The King bill meets the test: It's today's pattern for tomorrow's national socialization.—R.B.K.



CURTIS P. ARTZ, Jackson, associate professor of surgery at the University of Mississippi School of Medicine, was named first vice president of the Southeastern Surgical Congress at the group's March meeting in Miami Beach, Fla.

L. C. COSTLEY, JR., Tupelo, pathologist at North Mississippi Community Hospital, participated on the program of the Regional Workshop on the Organization and Operation of AMA Approved Schools of Medical Technology in March. Held at the University of Tennessee, the workshop was sponsored by the Joint Commission on Education in Medical Technology of the American Society of Medical Technologists and the American Society of Clinical Pathologists.

O. B. CROCKER, Bruce, has been named to the Bruce School Board for a five year term.

M. V. DARDIN, Vicksburg, was named president of the Vicksburg Civitan Club at the group's April meeting.

W. R. EURE, Bay Springs, was elected president of the Bay Springs Rotary Club at the group's March meeting.

THOMAS W. FRAZIER was featured in the March 30 issue of the *Commercial Dispatch* (Columbus, Miss.) for his 40 years of medical service in the small town of Crawford. Dr. Frazier's son, Dr. John T. Frazier, is a member of the Frazier-Reviere Clinic staff in Columbus.

J. A. GRAVES, Biloxi, has been elected to his fourth consecutive term as president of the school board.

GUY JARRATT, Vicksburg, has been named a director of the Vicksburg Rotary Club.

CARL G. NICHOLS, JR., Leland, has filed for alderman in the upcoming city elections, with primaries on May 9 and 16.

WILLARD H. PARSONS, Vicksburg, president of the Southeastern Surgical Congress, was given a "Mississippi Quail Luncheon" by state surgeons during the March meeting of the organization. All of the surgeons whom he helped train as residents were invited to the luncheon honoring Dr. Parsons, who is a clinical associate professor of surgery at the University of Mississippi School of Medicine.

G. T. SHEFFIELD, Harrison County psychiatrist, was featured in the March 29 issue of the Gulfport-Biloxi *Daily Herald*. The *Herald* reported Dr. Sheffield's difficulty in reaching complete retirement because he "just can't say no" to his patients. Ill health led to the doctor's resignation from the Gulfport VA on May 4, 1947. He remained at the Biloxi VA until Aug. 26, 1952. Dr. Sheffield opened his offices in Gulfport in 1957 where he conducted private practice until he recently decided upon "retirement," the second in his 47-year career.

R. N. WHITFIELD, Florence, was honored by the Jackson Alumni Club of Phi Delta Theta, international college fraternity, at its annual Founders' Day banquet in March. Dr. Whitfield is an alumnus of the Old Miss chapter, class of 1901. As part of the evening's activities the club presented the fraternity's Golden Legion award to Dr. Whitfield, a Phi Delta Theta for 64 years and a veteran of 43 years in public health work. Dr. Whitfield was director of the department of vital statistics of the State Board of Health from 1924 until 1958 when he retired. Dr. Curtis Artz, Jackson, is a director of the club.

MEETINGS

NATIONAL AND REGIONAL

American Medical Association, June 26-30, 1961, New York City. F. J. L. Blasingame, Executive Vice President, 535 N. Dearborn St., Chicago 10, Ill.

American Society of Internal Medicine, May 5-7, 1961, Miami Beach, Fla. Mr. G. Tod Bates, Executive Director, 350 Post St., San Francisco 8, Calif.

Southern Medical Association, Nov. 6-9, Dallas, Texas. Mr. Robert F. Butts, Executive Secretary, 2061 Highland Ave., Birmingham, Ala.

STATE AND LOCAL

Mississippi State Medical Association, May 9-11, 1961, Biloxi. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson.

Mississippi Academy of General Practice, Sept. 27-28, 1961, Jackson, Miss. Miss Louise Lacey, Executive Secretary, Walthall Hotel, Jackson, Miss.

Mississippi Society of Internal Medicine, May 8, 1961, Biloxi. Frederick E. Tatum, Secretary, 707 Katie Ave., Hattiesburg.

Amite-Wilkinson Counties Medical Society, First Tuesday March, June, September, December. S. E. Field, Centreville, Secretary.

Central Medical Society, First Tuesday Monthly, 6:30 p.m., Robert E. Lee Hotel, Jackson. George E. Gillespie, 514-A East Woodrow Wilson Drive, Jackson, Secretary.

Claiborne County Medical Society. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Second Wednesday March and November, 2:00 p.m., Clarksdale. Robert R. McGee, 150 Yazoo Ave., Clarksdale, Secretary.

Coast Counties Medical Society, First Wednesday March, June, September, and November. Charles N. Floyd, 1412-23rd Ave., Gulfport, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday January, April, July, and October, 1:00 p.m., Hernando Motel Cafe, Hernando. L. L. Minor, Route 9, Memphis 9, Tenn., Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. A. Wayne Sullivan, 1204-21st Ave., Meridian, Secretary.

Homochitto Valley Medical Society, Fourth Tuesday Monthly, 7:30 p.m., Natchez Country Club, Natchez. W. T. Colbert, Natchez General Hospital, Natchez, Secretary.

North Central District Medical Society, Second Wednesday March and September. W. A. Middleton, 214 Summit St., Winona, Secretary.

Northeast Mississippi Medical Society, Second Tuesday March, June, September, and December, Tupelo. Thomas W. Wesson, 421 Main St., Tupelo, Secretary.

North Mississippi Medical Society, First Thursday January, April, and October, Oxford. R. L. Wyatt, Holly Springs, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. Samuel O. Massey, Jr., 220 E. Canal St., Picayune, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. Thomas F. Puckett, 715 Arledge St., Hattiesburg, Secretary.

Tri-County Medical Society, Second Tuesday March, June, September, and December. A. V. Beacham, Magnolia, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Tom H. Mitchell, The Street Clinic, Vicksburg, Secretary.

Book Reviews

The Hand: A Manual and Atlas for the General Surgeon. By Henry C. Marble, M.D., consulting surgeon to the Massachusetts General Hospital. Cloth, 207 pages with illustrations by Mildred Codding. Philadelphia: W. B. Saunders Company, 1960. $7.00.

Treatises on surgery of the hand have increased in number in recent years. Many of them, written for the orthopedists, plastic surgeons, and the specialist in surgery of the hand, have lost sight of the role of the general surgeon in the initial care of hand injuries.

Since the advent of mechanized farming and the decentralization of industry to the smaller urban areas, a greater percentage of hand injuries are now seen first by the general surgeon and practitioner.

The author addresses his work to the general surgeon, employing his belief that the treatment given to the hand on the day it is injured to a large extent determines the future usefulness of that hand for better or for worse. It would seem that the endeavor to teach the principles of early care of hand injuries to the "man in the field" is logical and would be most rewarding.

The author, a recognized authority in the field of surgery of the hand, has compiled in one small manual a comprehensive, concise analysis of the many disorders of the hand, written in simple terms, and presented in a pleasant style.

Although primarily written for the general surgeon, its completeness and clarity of the pertinent points in diagnosis and treating traumatic injuries qualifies it as a good source of reference for those particularly interested in this exacting speciality.

The wide experience of the author is evident and his detailing of personal experiences, conclusions, individual technic, treatment, and results are concise and clear-cut.

Emphasis is primarily on diagnosis based on an understanding of the intricate anatomy and manual physiology. The clarity of his illustrations, relative to the anatomical structures of the hand and forearm, is worth many thousand words.

The how, when, and where factors in hand injuries serve to a great degree to determine the proper course of treatment. In dealing with traumatic wounds, the author points out the important principles of early care, e.g. cleaning the wound, conservative debridement, coverage, and correct positioning on splinting. It is interesting to note the author's technic in treating wounds with severed tendons in "no man's land," a very controversial subject. Certainly, successful suturing of tendons in this particular area requires a very careful appraisal of each individual case and a most exacting technic.

This comprehensive and informative monograph is outstanding and is an excellent addition to the surgeon's library and deserving of wide circulation.

J. T. Davis, M.D.

Complications in Surgery and Their Management. Edited by Curtis P. Artz, M.D., associate professor of surgery, University of Mississippi School of Medicine, and James D. Hardy, M.D., professor and chairman of the department of surgery, University of Mississippi School of Medicine, with contributions by 69 authorities. Cloth, 1075 pages. Philadelphia: W. B. Saunders Company, 1960. $23.00.

This book by two nationally known Mississippi surgeons may well become a surgical classic for it admirably fills the heretofore unmet need for a comprehensive text dealing primarily with the complications incident to general surgical procedures.

The keynote of the book is struck with the following quotation: "Harbors are made safe for mariners, not by records of prosperous voyages but by buoying the dangerous reefs and sunken ledges that have caused disaster."

Every surgeon knows that complications are the disasters of surgery. They cause the surgeon headache and heartache and delay the convalescence and indeed actually threaten the life of his patient. This book by pointing out the dangerous reefs of surgery will do much to speed the recovery of the surgical patient and add to the peace of mind of the surgeon.

Drs. Artz and Hardy have enlisted the aid of 69 outstanding surgeons. Each contributes to a chapter dealing with a subject in which he has a

special interest. The book is thus based on a vast personal experience which would not be available if it had been written by one author.

The field of general surgery is well covered, and the possible complications of each type of surgical procedure are discussed with methods for their prevention and treatment.

A chapter on anesthetic complications adds much to the value of the book.

The reviewer has greatly enjoyed the book and found it difficult to lay aside. Drs. Artz and Hardy, as well as their contributors, are to be complimented on an excellent job in producing this fine treatise on surgical complications.

GEORGE F. ARCHER, M.D.

Foreign Journals

Lymphatics of the Vulva. E. Parry-Jones: J. Obst. & Gynaec. Brit. Emp. 67:919, 1960.

No new information has been added to our knowledge of the lymphatics draining the vulva since the original work of Sappey in 1874. In reinvestigating this subject the author used intradermal injections of Patent Blue V (Evans Blue) in various parts of the vulva in 100 women undergoing gynecological operations; 0.1 to 1.0 cc. (usually about 0.5 cc.) of dye was employed, its spread observed, and diagrams made. In contrast to Sappey's observations the findings indicated that lymphatics from most parts of the vulva pass anteriorly through the mons to the inguinal nodes without crossing the labio-crural fold. The only exceptions are the lymphatics from the perineum which occasionally course upwards outside this fold.

These studies are applicable to the current surgical management of carcinoma of the vulva. Incisions described for radical vulvectomy by Way and others are often placed lateral to the labio-crural fold. The author believes that removal of the entire mons and, in many instances, the lower part of the urethra (which can be done safely) should be performed. On the other hand, the need for an incision which extends beyond the confines of the vulva can be avoided except in cases where growth approaches the labio-crural fold or involves the perineum. By planning the incision in accordance with these principles, better wound healing may be anticipated.

Comment. The importance of this work is twofold. First, it employs a relatively new *in vivo* technique to provide additional information on a subject supposed to have been settled long ago. Secondly, it has important practical applications for the operation of radical vulvectomy. This procedure, when properly performed and combined with inguinal and pelvic node dissections, has raised the five year survival rate of patients with carcinoma of the vulva from 30 per cent to 60 per cent. However, healing of the incision remains a formidable problem and any information such as this which may improve it is of value. The study itself, while interesting enough, indicates the need for additional work, since the diagrams leave something to be desired and the contralateral spread of vulvar carcinoma is not satisfactorily explained.

MICHAEL NEWTON, M.D.

Morbidity Reported Through March 24

The Mississippi State Board of Health reports the following occurrence of morbidity for 1961 through the 12th week of the year, ending March 24, 1961. Case totals reported are shown opposite the disease condition.

Tuberculosis, pul.	171
Tuberculosis, O.F.	10
Brucellosis	1
Dysentery, bacillary	10
Infection, staph.	4
Infection, meningococcal	
Meningitis	5
Meningococcemia	2
Tularemia	1
Infection, encephalitis	2
Infection, mononucleosis	34
Puerperal sepsis	1
Diarrhea of newborn	1
Hepatitis, inf.	434
Helminthic inf.	
Hookworm	380
Ascariasis	87
Histoplasmosis	11
Meningitis, O.F.	17
Infection, strep.	
Scarlet Fever	80
Strep. throat	713
Pertussis	10
Measles	353
Chickenpox	379
Mumps	201
Influenza	244
Gonorrhea	1,525
Syphilis	
Early	72
Late	63

MSMA's 93rd Annual Session To Open May 9; Scientific, Business, Festive Activities Scheduled

Many a doctor's door will be sporting an "OUT NOW, BACK SOON" sign May 9-11 as Mississippi physicians gather on the Gulf Coast for MSMA's 93rd Annual Session.

The meeting will have its headquarters in the Buena Vista Hotel with the White House, Biloxi, Tradewinds, and Edgewater Gulf Hotels also participating.

Although the big 93rd will open officially on Tuesday with the House of Delegates meeting, a number of early registrants are expected on Sunday, May 7, since most specialty societies have announced Monday meetings.

Highpoint of Tuesday activity will be the morning session of the House of Delegates. At that time, Dr. G. Swink Hicks, of Natchez, MSMA president, will present his farewell address, and Dr. Leonard W. Larson of Bismarck, N. D., president-elect of the American Medical Association, will speak.

Tuesday also marks the opening of the scientific assembly with the Sections on Medicine and Pediatrics meeting in the afternoon. Twenty-six speakers, 12 state and 14 out-of-state, are scheduled to speak before the seven scientific sessions during their Tuesday, Wednesday, and Thursday meetings.

The Woman's Auxiliary Annual Session will also open on Tuesday with a general session, a luncheon, and a workshop scheduled.

The Wednesday agenda will feature three section meetings—Ob-Gyn, Preventive Medicine, and the new General Practice group—and the annual banquet-dance in the evening. On the light side, the annual MSMA golf tournament and skeet shoot will be held Wednesday.

During Thursday House of Delegates activity, the Distinguished Service Oration will be given, reference committees will present their reports, and new officers will be named. The Thursday schedule also includes the Sections on Surgery and EENT. The 93rd Annual Session will officially end with the adjourning of the House of Delegates Thursday afternoon.

During the three day meeting, the Scientific Assembly, House of Delegates, technical and scientific exhibits, and secretary's office will be located at the Buena Vista as will all sessions of the Woman's Auxiliary.

In all, more than 75 speakers will appear before the 93rd at a score of separate meetings including the seven formal scientific sections, the Woman's Auxiliary, medical alumni groups, special breakfast, luncheon, and dinner occasions, and specialty society meetings. In the exhibit area, 56 displays will be presented including eight scientific and 48 technical.

Distinguished guests at the 93rd Annual Session will include AMA President-Elect Dr. Leonard Larson, Mrs. A. E. Margulis, Santa Fe, N. Mex., member, Board of Directors, Woman's Auxiliary to the AMA; Mrs. Roy Douglass, Huntingdon, Tenn., president-elect, Woman's Auxiliary to the Southern Medical Association, and an array of nationally and internationally known essayists.

Central Society Members Study Practical Politics

Members of the Central Medical Society are currently attending a special course in practical politics. The course, sponsored by the Jackson Chamber of Commerce, began March 15 and will run for nine weeks.

Entitled Action Course in Practical Politics, the classes are held each Wednesday at 7:30 p.m. in the Dean's Conference Room of the University of Mississippi School of Medicine.

Discussion leader for the course is Charles B. Henley, Jackson attorney and former Hinds County judge.

AMA President Attacks Health Care Bill

The proposed King-Anderson bill supported by President Kennedy would bankrupt the U. S. Social Security system and pave the way for total socialism, Dr. E. Vincent Askey, AMA president, told Natchez physicians and civic club members, during a March 28 speech.

Speaking before the Homochitto Valley Medical Society and Natchez civic and service clubs, Dr. Askey said, "Massive federal intervention into the medical care field is the wrong direction, for it gives to all over 65 regardless of need while taking from all regardless of their own obligations of family, shelter, clothing, food, and education."

"Furthermore," he said, "Social Security medicine is the stepping stone to full-blown socialized medicine in this country. The Socialist party itself just recently stated that the current administration proposal for Social Security medicine 'paves the way for socialized medicine.' "

Dr. Askey visited Natchez at the invitation of MSMA president Dr. G. Swink Hicks of Natchez to discuss problems of American medicine with civic and medical leaders and to take part in the annual pilgrimage activities.

At the March 28 meeting, Dr. Askey said that AMA supports the Kerr-Mills bill which was adopted in 1960. He said this plan gives economic help to the needy while at the same time leaving others free to help themselves, thus reducing the burden on government.

The AMA president attacked what he termed "two of the most popular myths about our aging population," i.e. that all old people are sick and in need of help and that all old people are in serious financial difficulty.

He quoted from a University of Chicago study which showed that, at the most, one of every five persons over 65 is sick to a degree which significantly limits his normal activity. The same study showed that about two-thirds of the persons who were ill said that their illness had interfered in no way with their normal mode of behavior, he said. Thus, said Dr. Askey, only about one out of every 16 persons over 65 has illness that hampers him significantly.

On the financial situation, Dr. Askey pointed out that the percentage of persons over 65 who are "needy" has been declining constantly. He said in 1950 some 22 per cent of all aged received old age assistance. In 1959 this declined to 15 per cent. And by 1970 the figure should drop to 11 per cent, he said.

Dr. Askey attributed this drop to the fact that more persons are enjoying private pension plans, more are receiving annuities, and more are receiving social security checks.

(The entire text of Dr. Askey's speech is printed on page 243 of this issue.)

Dr. and Mrs. Askey arrived in Natchez from their native Los Angeles on Sunday, March 26. In addition to their official business, the Askeys attended a number of social functions in their honor during their three day stay in the pilgrimage city.

On Tuesday, March 28, the Homochitto Valley Medical Society honored Dr. and Mrs. Askey with a lawn party at Twin Oaks, the antebellum home of Dr. and Mrs. Homer Whittington. Mrs. Askey attended a luncheon on the same date in her honor given by the Homochitto Valley Woman's Auxiliary.

A number of Mississippi medical officials and physicians were in Natchez to hear Askey. The entire medical group attended the Monday production of the Confederate Pageant, which depicts life in Natchez in bygone days. Anne Marie Hicks, daughter of Dr. and Mrs. G. Swink Hicks, reigned as queen of the pageant. A reception was held following the program in honor of Queen Anne Marie.

The Askeys left Natchez on Wednesday, March 29. Dr. Askey addressed the Hattiesburg Kiwanis Club on March 30 at the invitation of Dr. J. P. Culpepper, MSMA delegate to the AMA House of Delegates.

West Society Hears Dr. Allison at April Meet

Featured speaker at the April 11 meeting of the West Mississippi Medical Society was Dr. Fred Allison, Jr., of the department of medicine, University of Mississippi School of Medicine. Dr. Allison discussed "The Newer Antibiotics—A Proper Perspective."

During the business session, committee reports were given and the 93rd Annual Session was discussed.

The meeting was held at the Old Southern Tea Room in Vicksburg.



DR. ASKEY ARRIVES . . . slightly amazed at Mississippi's unseasonal warmth. Dr. Hicks is shown officially welcoming the AMA president to the land of hoopskirts and colonial mansions.

. . . PRESIDENTIAL ODYSSEY SOUTH . . .



WHAT DOES A PRESIDENT DO IN NATCHEZ? If he is Dr. E. Vincent Askey, president of the American Medical Association, he shakes a great many Mississippi hands, sees some Mississippi antibellism, and meets a Mississippi queen. Most important, he talks about American medical problems to a number of Mississippi physicians and civic leaders.







Left: WHAT GOES UP . . . Dr. Askey, Mrs. Maud Varnado, owner of the Towers, historic Natchez home, and Dr. J. P. Culpepper, Jr., admire an antebellum spiral staircase. Center: . . . MUST COME DOWN. Mrs. Askey, Mrs. Varnado, Dr. Culpepper, and Dr. Askey view the same staircase from above. Right: BUT THE AZALEAS IN CALIFORNIA WERE NEVER LIKE THIS. Dr. Askey, Mrs. Askey, and Mrs. J. P. Culpepper pause on the steps of the Towers to look at the gardens.

. . . *THE ASKEYS' PRIVATE PILGRIMAGE* . . .



THEY CALLED IT A SHELL CAMEO. Mrs. Edna Green Lott (seated left), owner of Arlington, shows Mrs. Askey a valued antique. Dr. Askey and Mrs. Ann Gwin Vaughan, Mrs. Lott's niece, look on. The picture was taken in Arlington's Gold Room.

MISTER, WOULD YOU LIKE TO SEE US DANCE? And so Dr. Askey saw his most inexpensive floorshow and the children entertained a president unaware.





A Queen and Her Subjects Pause for a Pix. Shown are Dr. Hicks, Natchez Pilgrimage Queen Anne Marie Hicks, Mrs. Hicks, Mrs. Askey and Dr. Askey.





Left. A Funny Thing Happened to Me on the Way Here Tonight . . . Dr. James Grant Thompson of Jackson, Dr. Askey, Thomas A. Hendricks, assistant to the executive vice president, AMA, and Dr. Stanley A. Hill of Corinth catch up on the latest ones. Right: Deep Discussion. Dr. William E. Lotterhos of Jackson and Dr. Askey are caught by Journal MSMA's photographer during an informal talk on national and state medical matters.

. . . *PARTY TIME NATCHEZ STYLE* . . .



Twin Oaks Reception. Two of MSMA's trustees, Dr. H. H. McClanahan, Jr. (left), and Dr. C. D. Taylor (right) chat with Dr. Askey. Wives are from left to right: Mrs. McClanahan, Mrs. Askey, and Mrs. Taylor.



WILL IT CONVINCE 'EM, FELLOWS? Dr. Lawrence W. Long, Dr. Askey, Dr. Hill, and Dr. Hicks go over Dr. Askey's luncheon speech.

. . . AND, FINALLY, BACK TO L.A. . . .



AUXILIARY LEADERS . . . talk with Mrs. Askey. From left to right are (front row) Mrs. John G. Egger, Mrs. Lee R. Reid, Mrs. Askey, (back row) Mrs. Charles Stern, Mrs. Walter T. Colbert, and Mrs. Hicks.



SO LONG TO A QUEEN AND A PRESIDENT FROM A PRESIDENT. Anne Marie and Dr. Hicks bid Dr. Askey good-bye for Natchez.

Jackson Doctor Receives LL.B. Degree

A Jackson physician went into court March 22 to add three initials to his name—LL.B.

Dr. John Vardaman Cockrell of the Veterans Administration Center in Jackson took the oath of attorney following the completion of his studies at the Jackson Law School and his passing of the state bar exam.

Chancellor W. T. Horton, who administered the oath, termed it a "remarkable feat" which Dr. Cockrell accomplished in becoming both a practicing physician and a lawyer.

Following the ceremony, Horton assured Cockrell that none of the present local lawyers would attempt to retaliate against the medical profession by studying medicine. However, Horton added that it is necessary for attorneys and jurists to have a working knowledge of various types of injuries which would be compensable or from which damage suits might arise.

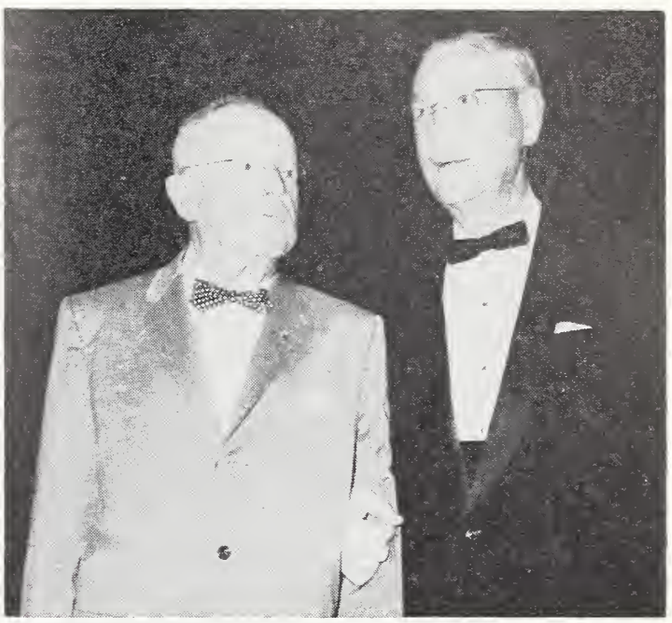
Adams County Doctors Active in Senior Years

During the recent Natchez medical events, JOURNAL MSMA had an opportunity to talk with two of Adams County's senior medical citizens, Dr. Joseph D. Shields of Pine Ridge and Dr. Jacob S. Ullman of Natchez.

At 87, Dr. Shields is still active and practices what he terms "first aid" on the help at Mount Repose, his home which is part of the Natchez pilgrimage. Dr. Shields is a member of a long line of physicians which started with his father, Dr. Bisland Shields, a civil war doctor. His son, Dr. J. D. Shields, Jr., is an internist in Concord, N. H., and his grandson, J. D. Shields, III, is a medical student at Tulane.



Dr. Joseph D. Shields of Pine Ridge (center) talks with Dr. James Grant Thompson of Jackson (left) and Dr. Stanley A. Hill of Corinth (right) about his historic home, Mount Repose, seen in the background.



Dr. Jacob S. Ullman is shown with Dr. E. Vincent Askey, AMA president, during Dr. Askey's March visit to Natchez. Dr. Ullman is a past president of MSMA and a member of the Fifty Year Club.

After receiving his M.D. degree from Memphis Hospital Medical College (now the University of Tennessee School of Medicine) in 1895, Dr. Shields started practicing in Adams County and has been there ever since.

A longtime leader in Mississippi medical organization, Dr. Ullman, now 79, was on hand when Dr. E. Vincent Askey, president of AMA, visited Natchez March 26-29. Dr. Ullman was president of MSMA in 1914 and has also served as president of the Homochitto Valley Medical Society. He received his medical degree from Jefferson Medical College in Philadelphia in 1903 and is a fellow in the Southeastern Surgical Congress.

Both Dr. Shields and Dr. Ullman are emeritus members of MSMA and members of the Fifty Year Club.

Science Writer Speaks To 1961 State Heart Meet

Parade's prizewinning science editor, Robert P. Goldman, challenged Mississippi Heart Association workers to "create a feeling of present danger" at MHA's annual dinner April 6.



New officers of the Mississippi Heart Association are shown following their election during the Eighth Annual Cardiovascular Seminar. Front row from left are General A. G. Paxton, Greenville, president; S. C. Hart of Jackson, treasurer, and Dr. Lucian Ferris, Vicksburg, president-elect. Standing from left are Joe W. Latham, Jackson, vice president, and Dr. Raymond Grenfell, Jackson, secretary.

He called attention to diagnostic methods "that the public must be made aware of to hold the tragedy of unused medical knowledge to the minimum."

Goldman, the associate editor of Parade Publications of New York, won the 1960 American Heart Association Blakeslee award for excellent reporting in the field of heart-blood vessel disease.

He called attention to the 905,000 persons who die yearly in the United States from heart disease and said, "Our task is to inform the public on all they may do so they will not be counted among the 905,000."

Following Goldman's talk, new officers of MHA were elected. General A. G. Paxton of Greenville was named president of the association for 1961 succeeding Dr. J. Manning Hudson of Jackson.

Other officers elected were Dr. Lucian M. Ferris of Vicksburg, president-elect; Joe W. Latham of Jackson, vice president; Dr. Raymond F. Grenfell of Jackson, secretary, and S. C. Hart of Jackson, treasurer.

Directors named included Dr. Joseph P. Melvin, Jr., Dr. Arthur C. Guyton, and Dr. Hudson, all of Jackson; Charles R. Sayre of Greenwood; Dr. J. P. Tatum of Meridian; Dr. Willard Boggan, Dr. A. L. Gray, and Larry Buffaloe, all of Jackson; Dr. W. K. Purks of Vicksburg; Dr. Norman Todd of Newton; Dr. F. E. Fyke, Jr. of Jackson; Lester Tuck of Pascagoula; Walter W. Gresham, Sr., of Indianola, and James Ballard of Tupelo.

Elected as new delegates to the American Heart Assembly were Dr. Grenfell and Mrs. Gertrude Nelson of Jackson.

The dinner was the social highpoint of the Eighth Annual Cardiovascular Seminar held April 5-7 in Jackson. The packed agenda included 18 lectures by five eminent specialists and panel discussions on heart diseases ranging from the outlook for babies born with bad hearts to the effect of exercise on the heart in senior citizens.

During the Wednesday, April 5, program Dr. Lysle H. Peterson, associate professor of physiology at the University of Pennsylvania School of Medicine reviewed the regulatory systems of the circulation.

Mayo Clinic's head of pediatrics, Dr. James DuShane, told the group that children underweight because of inborn heart defects will rapidly gain normal pounds following successful heart surgery, even if they are almost teen-age.

During Thursday's session Dr. E. Sterling Nichol of the Miami Heart Institute, told about his "before and after tennis" studies on 30 men over 60 years old.

Even an 81-year-old tennis player showed almost no heart changes after 16 singles, he reported. Pulse, blood pressure, and electrocardiographs were taken before playing and immediately after, he said.

Recognizing that tennis is more strenuous than most heart patients can risk, Dr. Nichol said that the "all but lost gentle art of walking is the exercise mainstay for the cardiac patient."

"In the last 15 years," he said, "I've spent as much time prescribing exercise as medicine for my heart patients. . . . The reasons exercise is beneficial are not clear cut, but it may be that exercise increases collateral circulation."

Later in the session, doctors attending the three day scientific program put on by the Mississippi

Heart Association and the University Medical Center heard Dr. Irving S. Wright of New York, professor of clinical medicine at Cornell University Medical College. A pioneer in treating heart disease, he was one of the first to try anticoagulants.

Discussing new medications to lower cholesterol levels in the blood, Dr. Wright said most authorities agree that high blood cholesterol is associated with hardening of the blood vessels, most frequent cause of death in man.

Scientists do not agree, he said, on whether the cholesterol a person eats has any effect on the cholesterol his body manufactures. Most of them think it does, the former American Heart Association president stated.

Dr. Wright pointed out that many substances have been tried in hopes of lowering blood cholesterol levels. The feat can be accomplished, he said, but researchers are not yet sure whether or not doing so changes the course of the disease.

Last speaker for the Thursday meeting was Dr. Claude S. Beck, professor of cardiovascular surgery at Western Reserve University School of Medicine. Dr. Beck told his listeners that "fatal" heart attacks need not kill a victim if emergency crews and the hospital take correct action.

An advocate of surgery to save some structurally sound hearts even after "fatal" attacks, Dr. Beck analyzed health factors, told how to reverse them, and described resuscitation.

The Eighth Annual Cardiovascular Seminar was held at the University Medical Center with approximately 100 physicians attending.

Dr. H. N. Mayes Receives Fifty Year Club Pin

Dr. H. N. Mayes of New Albany received a Fifty Year Club pin and certificate of membership on March 24. The presentation was made by Dr. R. E. Shands of New Albany at the weekly Rotary Club Luncheon.

In awarding the pin, Dr. Shands said, "We have many people in this community who have done a lot in the past, but Dr. Mayes is one of the state's medical greats. Anybody who has sat by the bedside of the sick for 50 years deserves recognition."

Dr. Shands unveiled a portrait of Dr. Mayes painted by Maude Faulkner of Oxford which will be hung in the lobby of Shands Hospital, formerly Mayes Hospital. The institution was founded by Dr. Mayes in 1916 when it was the only hospital in North Mississippi. Dr. Shands purchased the hospital from Dr. Mayes in 1938.

Dr. Nelson Addresses State Chamber of Commerce

Dr. Howard A. Nelson of Greenwood was one of the speakers for the 12th Annual Meeting of the Mississippi State Chamber of Commerce. Under the theme "A Salute to the Past, a Look to the Future," the program was held in Jackson April 6.

Dr. Nelson spoke on "Health and Sanitation" on the morning panel which considered the topic "Developing Mississippi's Tourist Attractions."

Said Dr. Nelson: "Tomorrow's community will be a healthful place in which to live only if yesterday's planners were provident, imaginative, and realistic. . . . For the most part, tomorrow's communities in Mississippi exist today. Our tasks lie in the challenge of continuous revitalization, rebuilding, replacement, and—quite frankly—resuscitation."

The former MSMA president pointed to the state chamber's Merit Community Program as a realistic means of measuring tomorrow's needs today through serious self-appraisal. He also pointed to physicians, dentists, personnel from allied health service professions, and the public health officers as sources of community assistance.

Dr. James J. Pittman of Tylertown told what was being done in his community along health and sanitation lines following Dr. Nelson's talk.



Dr. Howard A. Nelson speaks before the State Chamber of Commerce.

Majority of Mississippi Physicians Are Under 50

Over 60 per cent of Mississippi physicians are under 50 according to age distribution data just released by the Comptroller Department at association headquarters.

TABLE I

AGE DISTRIBUTION, ALL MISSISSIPPI PHYSICIANS

As of January 1, 1961

Age Group (1)	*Total* (2)	*Percentage* (3)
Under 40	645	38.1%
40-49	407	24.0%
50-59	263	15.5%
60 and over	379	22.4%
Totals	1,694	100.0%

As of Jan. 1, 1961, 62.1 per cent of the state's doctors were under 50 and only 22.4 per cent were over 60. This contrasts with data from the same period in 1953 when 54 per cent of the state physicians were under 50 and 35 per cent over 60.

Since July 1, 1960, the total number of licensed Mississippi physicians has increased from 1,661 to 1,694. This included a net increase of 26 among white males and of 37 among physicians 40 to 49 years of age.

Seventy-two per cent of the doctors now practice in towns of over 2,500 populations, as compared with 63 per cent in 1953. Only 479 are located in communities under 2,500. About 80 per cent of doctors between 40 and 60 years of age had urban locations, but only 58 per cent of those 60 and over practiced in cities.

TABLE II

URBAN-RURAL DISTRIBUTION, ALL PHYSICIANS

As of January 1, 1961

Size Community (1)	*Under 40* (2)	*40-49* (3)	*50-59* (4)	*60 and Over* (5)	*Total* (6)
Under 2,500	190	81	50	158	479
Over 2,500	455	326	213	221	1,215
					1,694

Comparison of urban and rural practitioners shows that the proportion under 40 is nearly the same for the two groups. However, in the urban group 44 per cent were 40-59 years of age and 18 per cent were 60 and over. In the rural group, 27 per cent were 40-59 and 33 per cent were 60 and over.

All age groups under 60 have increased steadily since 1952 while the 60 and over category has declined. The data show the greatest increase has come in the under 40 spot which has a net gain of 208 since 1952. In all, the 60 and over group has lost a total of 191 since the same year.

TABLE III

COMPARATIVE GAINS

January 1, 1952-January 1, 1961

Year (1)	*Age Group* Under 40 (2)	40-49 (3)	50-59 (4)	60 and Over (5)	*Year Total* (6)
1952	437	301	153	570	1,461
1953	489	312	159	528	1,488
1954	535	320	169	514	1,528
1955	548	334	174	476	1,532
1956	598	331	204	452	1,585
1957	602	350	226	431	1,609
1958	615	351	239	428	1,633
1959	614	367	257	405	1,643
1960	660	370	257	374	1,661
1961	645	407	263	379	1,694
Net Change	+208	+106	+110	−191	+233

Mississippi State Medical Association
Comptroller Department, March 24, 1961

As of Jan. 1, 1961, there were 1,585 white male, 44 white female, 62 nonwhite male, and three nonwhite female physicians in practice in Mississippi. Issaquena remains the only county without a physician.

Cardiac Clinic Opens At Kuhn Memorial Hospital

The West Mississippi Heart Clinic, first of its kind in the state, opened March 20 at Kuhn Memorial Hospital.

The clinic will be conducted by six Vicksburg specialists, who are contributing their services to the program sponsored by the Mississippi Heart

Association, the State Department of Health and Kuhn Hospital.

The clinic will be open to heart patients unable to meet medical expenses otherwise. Patients will be accepted on referral from their physicians or county health departments. Each will be given complete medical and laboratory examination and prescribed course of treatment.

The Vicksburg doctors will alternate conducting the clinic, two serving each Monday afternoon from 4 to 6 o'clock. They are Dr. W. K. Purks, clinic chairman, Dr. Emmett Neill, Dr. L. J. Clark, Dr. Lucian Ferris, Dr. Robert Shell, and Dr. A. P. Messina.

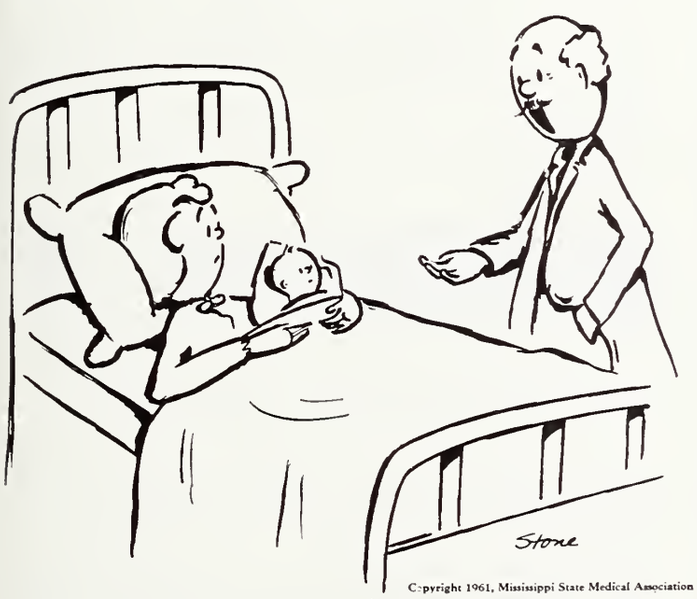
The clinic is under the general supervision of Dr. Nathan Lewis, superintendent of Kuhn Memorial Hospital, and will be conducted entirely separately from the regular hospital outpatient clinic.

Blood Bank Group Holds Third Annual Meet

The Third Annual Meeting of the South Central Association of Blood Banks was held March 3 and 4 in New Orleans, La. Blood bankers throughout the six-state area of Mississippi, Louisiana, Arkansas, Oklahoma, Texas, and New Mexico attended.

The program consisted of scientific papers plus a technical workshop designed for both physicians and medical technologists.

At the business session on March 3, Dr. Albert L. McQuown of Baton Rouge, La., was named president for 1962. He succeeded Dr. Kenneth M. Heard of Jackson, Miss.



"My bill? It's not too much to ask for delivering a boy who will probably be president."

Heart Disease Kills Most State Doctors

Heart disease is still the primary killer of Mississippi doctors according to the State Board of Health's annual study of physician deaths.

Fifteen out of the 44 doctors who died in 1960 suffered from diseases of the heart. In 1959 heart trouble claimed 12 physicians.

Vascular lesions and cancer were the second and third leading causes of deaths, with 25 per cent and 11 per cent respectively. Arteriosclerosis was next in rank, accounting for 7 per cent of the physician deaths.

Other major causes of death were influenza, pneumonia, and accidents.

"The leading causes of death in the medical profession vary little from those of the population as a whole," says Dr. A. L. Gray, executive officer of the State Board of Health, which is legally responsible for medical licensure in the state.

Last year the average age of deceased Mississippi physicians was 69.9 years, giving doctors about a three year edge over the average Mississippian. The average age in 1959 was 76.2, the highest average noted since state tabulations have been made on the medical group.

Of the 44 physicians who died in 1960, the youngest was 33 and nine were over 80 years of age.

CAUSES OF DEATH AMONG MISSISSIPPI PHYSICIANS 1959-1960

Cause of Death	*Number of Deaths* 1960	1959
Heart diseases	15	12
Vascular lesions affecting central nervous system	11	3
Malignant neoplasms	5	3
General arteriosclerosis	3	2
Influenza and pneumonia	2	2
Senility and ill-defined conditions	2	0
Accidents	2	0
Other diseases of circulatory system	1	0
Suicide	1	0
Diabetes mellitus	0	1
Hypertension without mention of heart	0	1
Ulcer of stomach	0	1
Hyperplasia of prostate	0	1
Other	2	4
Total	44	30

Accidents Are Leading Cause of State Deaths

Dr. A. L. Gray, executive officer of the State Board of Health, pointed out that accidents are the leading cause of death among Mississippi people aged 1 to 45 as he called for observance of World Health Day on April 7.

Theme for the observance this year was "Accidents Need Not Happen."

Each year, according to Dr. Gray, 1,494 Mississippians die from accidents, most of which could have been prevented by foresight and caution.

Home accidents still lead the causes of accidental death with 50 per cent. Most, if not all, of these can be prevented.

Among the other 50 per cent, automobiles, drowning, and hunting accidents account for a sizeable number of deaths.

Dr. D. E. Staton Honored For 50 Years Service

Dr. D. E. Staton of Columbus was awarded a Fifty Year Club pin and plaque for his half-century of medical service on March 30.

Dr. Frank Baird made the presentation paying tribute to Dr. Staton and giving a brief sketch of his accomplishments, including the national recognition he was accorded in his election to the American College of Surgeons.

Dr. Staton was a graduate of the University of Mississippi and completed his medical training at Tulane. He then entered practice as a general practitioner in Glamdora. Later he returned to New Orleans for special training at the Eye, Ear, Nose and Throat Hospital and did further graduate work in New York City.

He has been in practice in Columbus as an otolaryngologist since 1927, never missing a day from his office—except during the quail season.

The presentation of the pin and plaque was made at a dinner party given in Dr. Staton's honor at the home of Dr. and Mrs. S. B. Platt, Jr. He and Mrs. Staton also received a silver tray from the Lowndes County Medical Society and its Woman's Auxiliary.

Dates Set For Licensure Exams

Dates have been set for the annual examinations for medical licensure in Mississippi, according to Dr. A. L. Gray, executive officer of the State Board of Health.

The examinations on the first two years of medical studies will be given June 19.

On the following day, the examinations covering the third and fourth years' curriculum will be conducted.

Dr. Gray says that application for examination must be filed at least 10 days prior to the date of the examination. Application forms are available from his office.

The place of the examinations is the Robert E. Lee Hotel in Jackson, beginning at 8:00 a.m. each day.

Central Hears Panel On Breast and Lung Cancer

Central Medical Society members attending the group's April meeting heard a panel discussion on breast and lung cancer.

Dr. J. Harvey Johnston discussed "Surgical Aspects of Breast Cancer," Dr. H. K. Stauss spoke on "Surgical Aspects of Lung Cancer," and Dr. Bernard T. Hickman considered "Radiation Therapy in the Management of Breast and Lung Cancer."

Panel moderator was Dr. James Packer.

Father-Daughter Team Speaks to East Society

Members of the East Mississippi Medical Society heard an unusual medical team at their April 4 meeting.

Dr. L. H. Jorstad and his daughter Dr. Meredith Payne, both of St. Luke's Hospital in St. Louis, spoke to the state group on their respective specialities. Dr. Jorstad discussed "Cancer of the Face and Neck" and Dr. Payne surveyed some of the problems encountered in plastic surgery.

In practice, father and daughter form a surgery team in tumor operations. Dr. Jorstad removes the tumor and Dr. Payne does the necessary plastic reconstruction after the operation.

Both father and daughter attended the Washington University School of Medicine in St. Louis, Dr. Jorstad graduating in 1924 and Dr. Payne in 1950.

Clarksdale Meet Hears Three Scientific Papers

Three scientific papers were presented before the 118th semi-annual session of the Clarksdale and Six Counties Medical Society. The meeting was held March 22 in Clarksdale.

Dr. Whitman B. Johnson, Jr., of Clarksdale spoke on "Peripheral Occlusive Vascular Disease," and Dr. W. Winston Barnard of Clarksdale discussed "Experience with Psychiatric Problems in General Practice." Dr. J. R. Snavely, professor of medicine, the University of Mississippi School of Medicine, talked on "The Approach to the Jaundiced Patient."

During the business session Dr. John Archer, MSMA trustee, presented a brief report. Dr. Joe Anderson Campbell, Jr., was elected to membership in the society.

North Central Names Dr. Pennington President

Dr. Edward Pennington of Ackerman has been named president of the North Central Medical Society for the coming year.

Dr. Robert B. Townes will serve with Dr. Pennington as secretary.

These officers were named at the society's March meeting held at Hugh White State Park in Grenada. Guest speakers for the scientific program were Dr. J. R. Snavely of the department of medicine and Dr. Blair Batson, chairman of the department of pediatrics, University of Mississippi School of Medicine.

AUXILIARY

Auxiliary Plans Announced For 38th Annual Session

The 38th Annual Session of the Woman's Auxiliary to MSMA will open May 8 at the Buena Vista in Biloxi with registration and the preconvention executive board meeting.

The agenda for Tuesday, May 9, includes the general session. Featured on the program will be a talk by Mrs. Roy Douglass, Huntingdon, Tenn., president-elect of the Woman's Auxiliary to the Southern Medical Association, the president's report by Mrs. Lee R. Reid of Jackson, and election of officers.

Luncheon speaker on Tuesday will be Mrs. A. E. Margulis, Santa Fe, N. Mex., director, Woman's Auxiliary to the AMA, who will also install the 1961-62 officers.

On Tuesday afternoon the presidents and presidents-elect workshop and the postconvention executive board meeting will be held.

The past presidents breakfast is scheduled for Wednesday morning, May 10, and a coffee given by the Gulfport Medical Auxiliary later Wednesday morning will close the auxiliary session.

Mrs. Margulis to Represent AMA at State Convention

Mrs. A. E. Margulis of Santa Fe, N. Mex., will represent the Woman's Auxiliary to the American Medical Association at the Mississippi State Medical Auxiliary Convention in Biloxi, May 9 and 10.



Mrs. Margulis

Mrs. Margulis is a member of the AMA Auxiliary Board of Directors and serves on the Committee on the AMA Auxiliary *Bulletin*. She founded the Santa Fe County Auxiliary and has served as its president as well as president of the New Mexico State Auxiliary.

Mrs. Margulis received her A.B. degree from Wesleyan College in Macon, Ga., her B.S. in Library Science from the Carnegie Library School of Carnegie Institute of Technology in Pittsburgh, Pa., and did graduate work in medical librarianship at the School for Library Service, Columbia University in New York.

Dr. and Mrs. Margulis have a son, Peter, a senior at Cornell Medical College, New York City, a daughter, Elizabeth, a senior at Wellesley College, Wellesley, Mass., and one grandson.

Doctor's Day Observed Throughout Mississippi

Doctor's Day was celebrated throughout Mississippi on March 30. Observed in 16 states and the District of Columbia, the occasion was begun by the Southern Medical Association Auxiliary in 1935 to commemorate the first use of ether anesthesia in surgery by Dr. Crawford W. Long, a Georgia physician, in 1842.

On Doctor's Day the local organizations of the Woman's Auxiliary to the Mississippi State Medical Association chose different methods to honor members of the medical profession. For example:

. . . In Jackson the Central Medical Auxiliary entertained their doctors with a dinner-dance, and assembled a collection of photographs of local medical historical objects to contrast medicine in 1861 and 1961.

. . . In Vicksburg, physicians received red carnations, the symbol of Doctor's Day, from auxiliary members and attended a dinner party in their honor.

. . . In Gulfport and Hattiesburg, auxiliary members gave parties in honor of local physicians.

. . . In Belzoni, the medical staff of Humphreys County Memorial Hospital was honored with a luncheon by auxiliary members.

Mrs. Stern to Head Homochitto Auxiliary

Mrs. Charles Stern of Natchez will serve as president of the Homochitto Valley Medical Auxiliary for the coming year.

Other officers named at the March business meeting include Mrs. T. W. Talkington, Natchez, vice president; Mrs. Louis Lehmann, Natchez, secretary; Mrs. Jessie Henderson, Natchez, treasurer; Mrs. Herbert Hicks, Washington, AMEF chairman; Mrs. E. L. McAims, Natchez, mental health chairman; Mrs. Bruce Kuehnle, Natchez, publicity; Mrs. George Moss, and Mrs. Dudley Mutziger, both of Natchez, scholarship, and Mrs. Justin Loe, Natchez, Doctor's Day chairman.

The Homochitto Auxiliary gave a luncheon March 28 in honor of Mrs. E. Vincent Askey of Los Angeles, Calif., wife of the AMA president; Mrs. Lee R. Reid of Jackson, president of the Mississippi State Medical Auxiliary, and Mrs. John Egger of Drew, president-elect of the State Auxiliary, and a number of out-of-town auxiliary members. The visitors were in Natchez to hear Dr. Askey speak and to take part in pilgrimage activities.

Central Auxiliary Installs 1961 Officers

Mrs. David B. Wilson was installed as president of the Central Medical Auxiliary at its April meeting with Mrs. George Owen, former president of the Southern Medical Auxiliary, acting as installing officer.

Others installed were Mrs. J. Gordon Dees, president-elect; Mrs. R. W. Crowell, vice-president; Mrs. John Busey, treasurer; Mrs. Rush Netterville, historian, and Mrs. P. R. Greaves, parliamentarian. Mrs. Ross Bass, secretary, was not present for the ceremony.

Mrs. Riddell Named President of North Central

The North Central Medical Auxiliary named Mrs. M. S. Riddell of Winona president and Mrs. A. T. Nadeau of Grenada president-elect at its March meeting in Grenada.

Other officers include Mrs. Herbert R. Power of Vaiden, secretary-treasurer; Mrs. James E. Booth, Eupora, mental health chairman; Mrs. Edward Pennington, Ackerman, Doctor's Day chairman; Mrs. W. A. Middleton, Winona, historian and public relations; Mrs. S. B. Carruthers, Grenada, civil defense chairman; Mrs. S. Lamar Bailey, Kosciusko, AMEF chairman; Mrs. Roy Smith, Durant, nurse recruitment chairman, and Mrs. Coleman Pickle, Kosciusko, legislative chairman.

Clarksdale Auxiliary Names 1961 Officers

Mrs. Jack Sartin of Clarksdale was elected president of the Clarksdale and Six Counties Medical Auxiliary at the group's March meeting.

Mrs. Steve C. Leist will serve as vice president and Mrs. C. L. Manning as secretary-treasurer. Both are from Clarksdale.

Eighteen members attended the meeting held in the home of Mrs. Melvin Ehrich.

NEW MEMBERS

The following physicians have been elected to membership by their respective component medical societies in the Mississippi State Medical Association and the American Medical Association:

CALDWELL, ROBERT SIMS, Tupelo. Born Baldwyn, Miss., Nov. 1, 1921; M.D., University of Virginia, Charlottsville, 1950; interned Duke University Hospital, Durham, N. C.; residencies University of Virginia Hospital, three years, Beckley Hospital, Beckley, W. Va., one year, and University Hospital, Jackson, Miss., one year; certified by American Board of Surgery; member American College of Surgeons, Southeastern Surgical Congress, and Southern Medical Association; U. S. Army, two years; elected March 14, 1961, by Northeast Mississippi Medical Society.

CAMPBELL, JOE ANDERSON, JR., Clarksdale. Born Morristown, Tenn., May 15, 1934; M.D., University of Tennessee, Memphis, 1958; interned University of Tennessee Memorial Research Center and Hospital, Knoxville; currently serving in U. S. Army; elected March 22, 1961, by Clarksdale and Six Counties Medical Society.

CHAMPION, JAMES THOMAS, Meridian. Born Woodland, Mississippi, April 23, 1915; M.D., University of Tennessee, Memphis, 1954; interned Mississippi Baptist Hospital, Jackson; U. S. Air Force, two years; elected Feb. 7, 1961, by East Mississippi Medical Society.

COLLUM, BILLY TOMMY, Fulton. Born Itawamba County, Miss., Dec. 23, 1929; M.D., Harvard University, Boston, Mass., 1954; interned Jefferson Davis Hospital, Houston, Texas; elected March 14, 1961, by Northeast Mississippi Medical Society.

DOWDY, ELIZABETH GERALDINE, Jackson. Born Etowah County, Ala., Aug. 25, 1927; M.D., University of Alabama, Birmingham, 1955; interned Birmingham Baptist Hospital; anesthesiology residencies Birmingham Baptist Hospital one year and Columbia Presbyterian Hospital, New York City, two years; member American Society of Anesthesiologists; elected Feb. 7, 1961, by Central Medical Society.

GRIESHABER, FREDERICK CLEARY, Biloxi. Born, New Orleans, La., May 19, 1919; M.D., Louisiana State University, New Orleans, 1942; interned Charity Hospital, New Orleans; dermatology fellowship, L.S.U., one year; dermatology residency Charity Hospital, two years; certified by American Board of Dermatology and Syphilology; member American Academy of Dermatology and Syphilology, International Society of Tropical Dermatology, Southern Medical Association, and Louisiana Dermatology Society; Major, U. S. Air Force, three years; elected Nov. 2, 1960, by Coast Counties Medical Society.

HERRICK, THOMAS GUNDERSON, Biloxi. Born Humboldt, Iowa, September 8, 1905; M.D., State University of Iowa, Iowa City, 1928; interned Broadlawns General Hospital, Des Moines, Iowa; Captain, U. S. Army, two and one-half years; elected Nov. 2, 1960, by Coast Counties Medical Society.

KIRK, ROBERT DIXON, JR., Tupelo. Born Tupelo, Miss., Oct. 24, 1928; M.D., University of Pennsylvania, Philadelphia, 1954; interned Presbyterian Hospital, Philadelphia; general surgery residency, Presbyterian Hospital, three years; elected March 14, 1961, by Northeast Mississippi Medical Society.

LUNCEFORD, TRAVIS EUGENE, Maben. Born Slate Springs, Miss., Jan. 8, 1930; M.D., Tulane University, New Orleans, 1956; interned Touro Infirmary, New Orleans; elected March 14, 1961, by Northeast Mississippi Medical Society.

MALVANEY, ERROL DELMAR, Sanatorium. Born Jackson, Miss., July 2, 1933; M.D., Tulane University, New Orleans, La., 1957; interned Charity Hospital, New Orleans; U. S. Navy, two years; elected March 7, 1961, by Central Medical Society.

THOMAS, GEORGE EUGENE, Gulfport. Born New Orleans, La., April 13, 1913; M.D., Louisiana State University, New Orleans, 1938; interned Southern Baptist Hospital, New Orleans; two year preceptorship in anesthesiology and two years residency in anesthesiology at Charity Hospital, New Orleans, La.; Major U. S. Air Force five years; elected Sept. 7, 1960, by Coast Counties Medical Society.

WOODBRIDGE, HARDY BONIFANT, JR., Jackson. Born Laurel, Miss., May 9, 1923; M.D., Tulane University, New Orleans, La., 1958; interned University Medical Center, Jackson; one year general practice residency University Medical Center, Jackson; Captain, U. S. Army, three years; elected March 7, 1961, by Central Medical Society.

50,000 Expected to Attend AMA 110th Annual Session

The American Medical Association's 110th annual meeting, the "world's fair of medicine," will bring an estimated 50,000 persons, including 25,000 physicians, into New York City, June 25-30.

The five-day convention, biggest of its kind in the world, will attract not only doctors, but also their wives and families as well as residents, interns, exhibitors; in fact, people connected with all the allied fields of medicine. Hence, the convention theme: "Teamwork in Medicine."

The 1961 meeting will mark the eighth time that the AMA has met in New York. The last convention there was in 1957 when 23,888 physicians registered.

Technical exhibits, numbering 827 and displaying everything from medical books to diapers, and more than 350 scientific exhibits largely developed, designed, and manned by physicians reporting their research, will take up practically every inch of space on all four floors of New York's big Coliseum.

The AMA meeting will open formally on Sunday, June 25, with a special preview luncheon and showing in the Coliseum for AMA officers and committee chairmen, members of the Board of Trustees, representatives of the Pharmaceutical Manufacturers' Association, and invited guests.

In the past, AMA conventions opened on Monday, but as a convenience to physicians and in anticipation of the heavy attendance, both the registration facilities and the technical and scientific exhibits will be open and staffed until 5 o'clock Sunday afternoon.

Registration hours, Monday through Thursday, will be from 8:30 a.m. to 5:30 p.m., and until 12 noon on Friday, the final day. The Coliseum will be open, however, to physicians only on Tuesday, Wednesday, and Thursday mornings.

Dr. Leonard W. Larson, 63-year-old pathologist and clinic executive from Bismarck, N. D., will be inaugurated as president of the AMA at 8:30 p.m., Tuesday, in the Waldorf-Astoria ballroom. Dr. Larson, who will give his inaugural address at that time, succeeds Dr. E. Vincent Askey, Los Angeles surgeon.

More than 2,000 physicians will take part in the AMA scientific program, which is designed to keep doctors abreast of what's new in medicine.

Teaching mediums will include lectures, symposiums, panel discussions, movies, and closed-circuit television.

Mead Johnson Reports Physician Service Program

A program of facilities and resources "to help the physician help his patients," is outlined in a new "annual report" for the medical profession just issued by Mead Johnson Laboratories, division of Mead Johnson & Company, Evansville, Ind., manufacturers of nutritional and pharmaceutical products.

The report details some 20 activities included in the firm's Service in Medicine Program.

As listed and described in the new brochure, the various resources embraced by the Service in Medicine Program, include:

Reprints of medical articles, library research, bibliographic lists, scientific exhibits, awards for pediatric research, fellowship awards for graduate training, medical lectures, editorial assistance, air mail information service, and practice aids.

DEATHS

DALY, GEORGE SHACKELFORD, Columbia. M.D., Tulane University, New Orleans, La., 1928; interned Charity Hospital, New Orleans, two years; past president of the South Mississippi Medical Society; died March 8, 1961, aged 57.

MARSHBURN, CLARENCE BARDEN, Philadelphia. M.D., Atlanta College of Physicians and Surgeons, Atlanta, Ga., 1906; postgraduate course New Orleans Polyclinic, 1908; died Feb. 8, 1961, aged 84.

SMITH, FRANKLIN F., Crystal Springs. M.D., Memphis Hospital Medical College, Memphis, 1906; postgraduate course at Tulane University; emeritus member of MSMA and member of Fifty Year Club; practiced medicine for 54 years and served as health officer for Franklin County for six years; died March 7, 1961, aged 78.

WADLINGTON, JAMES AUGUSTUS, Belzoni. M.D., Tulane University, New Orleans, 1911; interned Charity Hospital, New Orleans; practiced medicine for almost 50 years; died March 4, 1961, aged 85.

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ORIGINAL PAPERS

Panhypopituitarism and the Effect On the Adrenal Gland

LEO J. SCANLON, JR., M.D.
Jackson, Mississippi

In recent years many investigators have come to believe that the pituitary gland has little control over salt and water regulation. The majority of this evidence has come from animal experimentation. A six-year-old female who died of primary pituitary carcinoma is the basis of this paper. Although she had severe panhypopituitarism prior to death, she maintained a normal electrolyte balance. This patient and several collected from the literature showed a preservation of the zona glomerulosa of the adrenal cortex which indicates that the zona glomerulosa is not dependent upon the hypophysis. The normal electrolyte balance of this patient also confirms the recent ideas that the zona glomerulosa elaborates the main salt and water controlling hormones. The criteria for establishing a pituitary neoplasm as malignant is also discussed.

COMPLETE DESTRUCTION of the pituitary gland offers an opportunity to study the adrenal glands reaction to loss of the hypophyseal "tropic" hormones. During the past few years evidence has been growing to show that the pituitary gland has little control over salt and water regulation. The majority of this evidence has come from animal experimentation. A six-year-old female who died of primary pituitary carcinoma is the basis of this discussion. She had severe panhypopituitarism prior to death, yet maintained a normal electrolyte balance.

Of the three zones of the adrenal cortex, the outer or zona glomerulosa is independent of pituitary control. Sarason[1] using rats noted preservation of the zona glomerulosa following hypophysectomy. This preservation was in striking contrast to the atrophy of the zona fasciculata and reticularis. Swann[2] had earlier noted this phenomenon in 1940.

Dean and her colleagues[3] have shown that in rats the salt water regulating hormones are elaborated by the adrenal cortical zona glomerulosa. She also confirmed the failure of the zona glomerulosa to undergo atrophy after pituitary ablation.

This phenomenon of failure of the zona glomerulosa to undergo atrophy in states of pituitary hypofunction has been noted in human cases by McKay, Burnett, and Burrows,[4] Shimkin,[5] Elden and Kumner.[6] In Israel and Conston's article[7] on unrecognized pituitary necrosis there is an illustration of their patient's adrenal gland. This illustration shows a relative prominence of the zona glomerulosa.

From the Department of Clinical Laboratory Sciences, University of Mississippi School of Medicine.

Maclean[8] concluded that sodium conservation is independent of pituitary control in man. Luetscher and Axelrad[9] reported two human cases of panhypopituitarism and found the urinary output of "sodium-retaining corticoid" to be normal.

Farrell[10] found little reduction in aldosterone secretion in dogs following pituitary ablation. He and his colleagues[11] later achieved atrophy of the adrenal cortex, except the zona glomerulosa, by prolonged administration of adrenal corticosteroids. They state that the prolonged administration of these corticosteroids appears to be the physiologic equivalent of hypophysectomy. From these experiments they deduced that the adrenal zona glomerulosa is not dependent upon ACTH.

Our case confirms these observations because she had a normal electrolyte balance and had no atrophy of her adrenal cortical zona glomerulosa despite panhypopituitarism.

CASE REPORT

This 6-year-old white female was delivered by breech extraction after nine hours of uneventful labor. She was a full term child who cried readily. All other early postnatal history was uneventful.

An intolerance to cold had been present for the last four years of her life. She is said to have been uncomfortable each winter and disliked very cold drinks.

The child had one hospital admission in a distant city prior to being admitted to the University of Mississippi Medical Center. This first admission took place because of a generalized convulsion. She had had no previous convulsions. Her blood sugar level was 15 mg. per 100 ml. of blood on this first admission. At this time two Thorn Tests using ACTH were performed and reported as showing no significant drop in the number of circulating eosinophils. Her history taken at that time revealed a six month period of polydipsia, polyuria, nocturia, and lassitude. Four months prior to her first admission she began suffering from extreme fatigability. Her appetite had remained normal. She perspired excessively for several months prior to hospitalization. Upon discharge she was placed on cortisone 10 mg. daily. No significant change in her previous symptoms resulted from this hospitalization.

She was admitted to the University Hospital one month later. During this interval she had begun to have frontal headaches, loss of memory for recent events, and occasional episodes of vomiting. Shortly before this final admission she had had personality changes and ocular difficulties. Whereas she had always been a docile child, she became progressively more demanding in her wants and desires. Her ocular difficulties consisted of diplopia and blurred vision. She had lost four pounds during the previous four months.

On admission to the University Hospital she was found to be a pale, asthenic 6-year-old white female. She was physically lethargic, but somewhat alert mentally. Her weight was 36.5 pounds and height was 44 inches. The ears, nose, and throat were normal. Her pupils were 3 mm. in diameter, equal, and reacted to light and accommodation. No nystagmus was seen. A fundoscopic examination revealed normal optic discs and retinae.

The general physical examination was essentially normal. A neurologic examination revealed no muscle atrophy or abnormalities, no pathologic reflexes, and essentially normal sensory systems. All cranial nerves were intact, and her gait and station were normal.

LABORATORY WORK

Hemoglobin 12.1 gm. per 100 ml. of blood, hematocrit 35 per cent, and total leukocyte count 7,200 per cubic mm. The differential leukocyte count was lymphocytes 45, eosinophils 4, monocytes 7, basophils 1, band forms 1, and segmented polymorphonuclear neutrophils 42. A protein bound iodine examination was reported as being 3.1 micrograms per 100 ml.

Her blood chemistries were as follows: serum calcium 6.0 mEq., chlorides 99 mEq., potassium 4.3 mEq., sodium 146 mEq., and blood glucose 69 mg. per cent. A serologic test for syphilis was negative.

Urine studies showed total daily average output of 2.5 liters, specific gravity 1.002, pH of 5.5, with no albumin or glucose. Only rare leukocytes and no erythrocytes were noted in the urine. Her urinary 24 hour output of calcium was 14 mg. Other urine chemistry determinations were chlorides of 10 mEq., sodium of 157.3 mEq., and potassium of 567.6 mEq. per liter during 24 hours.

The cerebrospinal fluid was under normal pressure and contained 37 mg. of protein per 100 ml. The cerebrospinal glucose was 92 mg. per cent and the chlorides were 125 mEq. per liter. The cerebrospinal fluid contained 11 polymorphonuclear leukocytes and 7 lymphocytes per cu. mm.

A Thorn Test, using ACTH, was significant in that after a four hour interval the circulating eosinophil level was 277 per cu. mm. whereas it was 521 cu. mm. in the resting state.

Roentgenograms revealed a distinct thinning of the posterior portion of the sella turcica, but no enlargement. A pneumoencephalogram was essentially normal except for lack of filling of the basilar cisterna.

HOSPITAL COURSE

After being admitted, the child was continued on cortisone, 5 mg. twice daily. Codeine 15 mg. was given as necessary for headaches. Several liters of 5 per cent glucose in distilled water were given intravenously during her course in the hospital. On the eighth hospital day she was started on dessicated thyroid, 16 mg. daily, and pitressin tannate in oil, 0.2 ml. intramuscularly daily.

Her headaches became progressively more severe and frequent during her last days of life. She slept almost constantly after admission. On the 11th hospital day the child quietly died. At time of death she was very cyanotic.

NECROPSY FINDINGS

Necropsy was performed four hours after death. The body measured 115 cm. and was thin but well developed. Skin turgor was good and the external genitalia were normal.



Figure 1. Photograph showing sagittal section of brain with pituitary tumor expanding into the hypothalmic areas. In center is shown the sella turcica with the primary tumor mass.

Her heart weighed 75 gm. and was normal. The lungs had a patchy pneumonitis and atelectasis but were otherwise normal. The liver weighed 490 gm. and was normal as were the bladder, uterus, ovaries, and gastrointestinal tract. The adrenal glands had a total combined weight of 5 gm. and were grossly normal.

Examination of the cranial cavity revealed a 1.5×2 cm. mass protruding from the sella turcica. This mass was of a whitish-pink color, and gelatinous in consistency. It extended into the third cerebral ventricle anterior to the optic chiasm. The tumor was "dumb-bell" in shape due to its narrow mid-portion anterior to the optic chiasma.

Tumor tissue filled the entire sella and had eroded for several millimeters into the sphenoid sinus. The posterior clinoid processes were loose due to tumor infiltration.

The undersurface of the hypothalamus, mesencephalon, and pons were infiltrated with tumor. A sagittal mid-line section revealed tumor filling the third cerebral ventricle (Fig. 1). No hydrocephalus was present. A small benign pineal cyst was noted.

MICROSCOPIC DESCRIPTION

The tumor was composed of solid sheets of anaplastic pleomorphic cells (Fig. 2). The nuclei were oval or spheroidal in shape and vesicular. Most of the nuclei had crenated nuclear membranes and a large karyosome. Mitotic figures were seen on the average of one per high power field. The cytoplasm was scanty, ill-defined, and contained no stainable granules by use of the hematoxylin-eosin, Gomori trichrome, and Mallory-Heidenhain staining methods. Small vascular channels, which appeared to be dilated sinusoids, were common throughout the tumor. No acinar formation was seen. Multiple sections of the sella turcica revealed no residual pituitary tissue.

Brain: Tumor cells were found to have invaded, by direct extension, the hypothalamic regions. These malignant cells were found in the Virchow-Robin spaces several centimeters from the main tumor mass. No evidence of capsular formation was seen at any portion of this tumor's periphery.

Thyroid: The thyroid acini were large and lined by low cuboidal cells. No peripheral vacuolization was seen in these colloid filled acini. There was

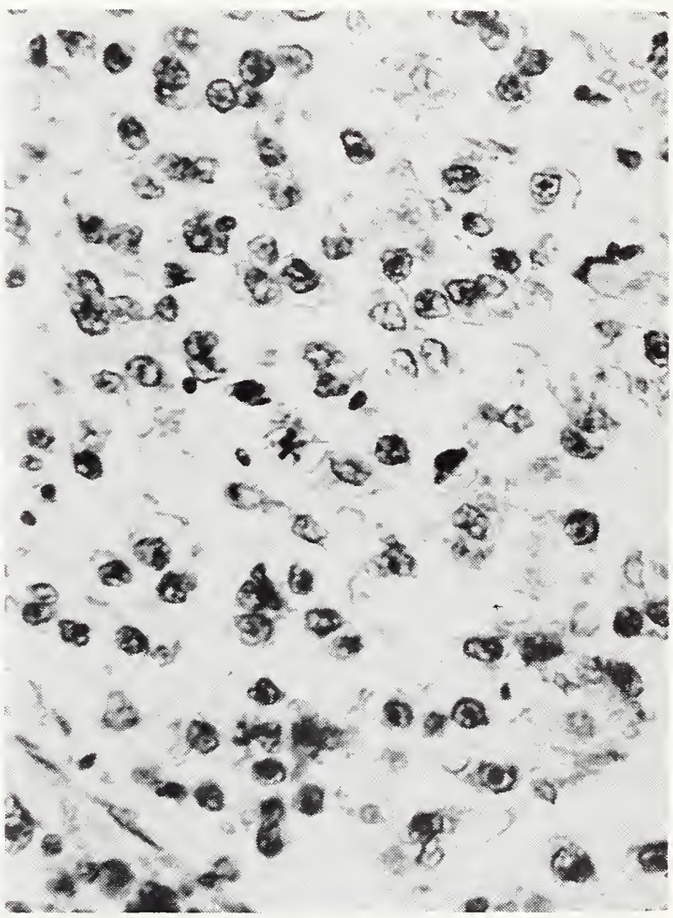


Figure 2. Photomicrograph showing pleomorphic, anaplastic tumor cells from region of pituitary gland. Magnification is 300 diameters.

moderate variation in the size of these thyroid acini.

Adrenal Gland: The medulla was intact and normal. The adrenal cortex was thin and atrophic. The zona glomerulosa however stood out prominently (Fig. 3). The atrophic zona fasciculata and reticularis occupied the inner one-half of the cortex. According to Maximow[12] by the age of four the three definitive layers of the adrenal cortex are present. Thus this patient should have had all of her adrenal cortical layers present.

DISCUSSION AND COMMENT

This case illustrates two important points. First it confirms the work of those who have shown that the zona glomerulosa of the adrenal cortex is concerned with salt and water metabolism and free of hypophyseal control. Secondly, it is an example of a rare pituitary neoplasm in a child.

This tumor has some resemblance to those termed disgerminoma or seminoma. However no lymphocytic infiltrate is found in this tumor. Willis[13] records a primary pituitary carcinoma in a girl of 14 which "showed a seminoma-like structure."

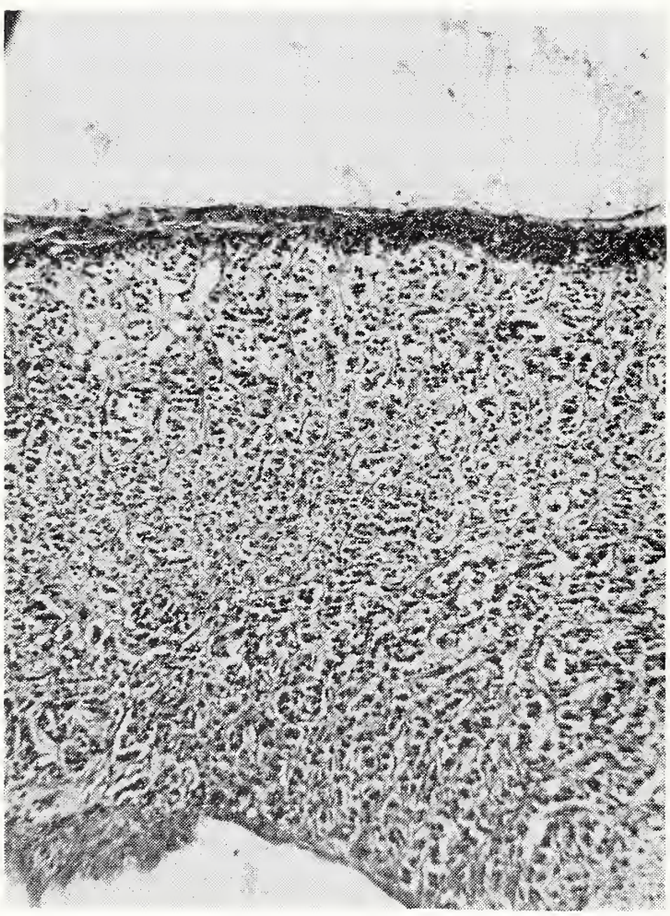


Figure 3. Photomicrograph of the adrenal gland, showing thinning of entire cortex, except the outer zona glomerulosa.

As discussed by King[14] there has been little agreement as to what pathologic findings actually constitute primary pituitary carcinoma. Bailey[15] believes that the presence of mitotic figures indicates malignancy in a pituitary neoplasm. He states that despite bony or other adjacent tissue invasion, if the tumor lacks mitotic figures, it is benign. Kernohan and Sayre[16] essentially agree with Bailey. Jefferson[17] in 1940 established a set of criteria for diagnosis of pituitary malignancy. His criteria was founded upon invasive activity of the tumor. He concluded, "Unless there is either invasion or metastasis, a tumor, whatever its size or ramifications, or whatever its cellular structure, must be considered to be benign."

Kraus[18] has established a more restrictive set of criteria. He states, "The most reliable sign of malignancy, aside from infiltrating growth, is anaplasia of the tumor cells, characterized by irregularity in size and shape of cells and nuclei. . . ." The tumor in this 6-year-old patient fulfills all the above criteria for being a primary malignant epithelial neoplasm.

The tumor in our patient had extended only a few millimeters into the sphenoid sinus. Extension into the nasal cavity by pituitary tumors is very rare as commented upon by Kay.[19]

Primary intrasellar pituitary tumors are rare in children. Kernohan and Sayre[16] report 565 patients with chromophobe adenoma of which only two were under 9 years of age.

SUMMARY

A 6-year-old female who died of primary pituitary carcinoma is presented. She exhibited marked panhypopituitarism. The effect of panhypopituitarism on the adrenal gland is one of partial involution of the cortex. This patient and several collected from the literature showed a preservation of the zona glomerulosa of the adrenal cortex. This finding lends support to the evidence, previously shown in experimental animals, that the zona glomerulosa is not dependent upon the hypophysis. The normal electrolyte balance of this patient also confirms the recent ideas that the zona glomerulosa elaborates the main salt and water controlling hormones.

The criteria for establishing a pituitary neoplasm as malignant is discussed. ★★★

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ON THE OTHER HAND . . .

A longtime inmate of a mental hospital was pronounced cured by the examining board and came to bid the director goodbye before faring into the outside world.

"What are your plans?" asked the director.

"I haven't quite made up my mind," confided the ex-patient. "I may resume my medical practice. I've also been thinking about becoming a newspaper reporter. Then, on the other hand, I may be a tea kettle."

Management of Common Throat Infections In Office Practice

CHARLES E. WARD, M.D.
Jackson, Mississippi

In discussing the management of common throat infections, the author pays special attention to streptococcal infections, a frequent and important problem in the care of children. Symptoms, differential diagnosis, and methods of treatment are considered.

STREPTOCOCCAL INFECTIONS will be the chief topic of discussion in this paper because of their frequency and importance. The pharynx alone may be involved in these infections, but in children other parts of the respiratory tract are often infected along with the pharynx.

There is no one best way of treating streptococcal infections. Consequently, a number of possible methods of treatment will be considered in the discussion of management.

STREPTOCOCCAL PHARYNGITIS

Many streptococcal infections are not recognized. Some patients, especially the very young, do not develop typical symptoms or signs. It is important that we make every practical attempt to recognize and adequately treat these infections as glomerulonephritis and rheumatic fever follow about 3 to 5 per cent of inadequately treated streptococcal infections. In some epidemics many cases of nephritis are seen in a short time. Fortunately, nephritis does not show a tendency to recur, but we are all concerned about recurrences of rheumatic fever.

It has been emphasized by Stillerman and his associates that combinations of symptoms and signs are better indicators of streptococcal pharyngitis than single symptoms and signs.[1] They list in order of importance:

1. Scarlatiniform rash
2. Petechiae or red follicles on the soft palate
3. Intense redness or edema of the pharynx
4. Exudate on tonsils or pharynx
5. Enlarged tender anterior cervical nodes.

These signs were more constant in children 4 years of age or older but agreed with throat cultures of beta hemolytic streptococci in only 70 per cent of their cases. On the other hand other workers have shown positive throat cultures in 95 per cent of cases of streptococcal pharyngitis and 10 per cent of positive cultures in well school children.

The symptoms are somewhat variable. Many children will insist that they do not have a sore throat while others may complain of extreme pain and difficulty in swallowing. These patients may have headache and vomiting and their temperature often goes to 103 degrees F. or over. These infections are not often accompanied by hoarseness or cough. The relative frequency of bacterial infections and of viral infections changes in a community from time to time.

ROUTINE THROAT CULTURES

Some recommend routine throat cultures stating that the sequelae of streptococcal infections are not materially increased by delaying treatment for two or three days. I do not often take such cultures in the office unless there is a question of diphtheria or unless an infection fails to clinically respond to adequate treatment. Immediate examination of stained throat smears is also advocated by some physicians.

The one most helpful laboratory procedure in

From the Department of Pediatrics, Mississippi Baptist Hospital.
Read before the regular meeting of the Central Medical Society, Jackson, March 7, 1961.

my experience in the office has been the white blood cell count. Usually the white blood count is elevated to 12,000 or more in bacterial infections. With a few exceptions the viral infections rarely elevate the leukocyte count to this degree. A differential blood count is ordered if indicated to help establish a diagnosis, especially if infectious mononucleosis is suspected.

The streptococcus is probably the most common bacterial infection in the pharynx. The pneumococcus, staphylococcus, and the influenza bacillus also may infect the pharynx. At times mixed infections are present.

RESPONSE TO PENICILLIN

The streptococcal and pneumococcal infections are about the only ones that will consistently respond to penicillin. This response to penicillin should be clinically noticeable within 48 hours. Penicillin is bactericidal and is the antibiotic of choice in streptococcal infections. If oral penicillin is given, it must be continued for a minimum of 10 days according to the recommendations of the American Heart Association.

Oral treatment is less likely to cause serious allergic reactions. It is not quite as efficacious in eradicating streptococci from the throat as is the parenteral treatment. Oral treatment may not be tolerated because of diarrhea or other symptoms. Unfortunately the oral penicillin may be discontinued after the child is symptom free in spite of written instructions and orders to continue it 10 days.

TREATMENT OF CHOICE

My treatment of choice for a suspected streptococcal infection in a child who is not known to be allergic to penicillin is to give one injection of Wyeth's All Purpose Bicillin, containing in 2 cc. 300,000 units potassium penicillin G, 300,000 units procaine penicillin G and 600,000 units benzathane penicillin G. The usual dose for a child is 2 cc. to 3 cc. while an adult would need 4 cc. This dosage meets the recommendations of the American Heart Association. This preparation gives quick coverage plus penicillin effect for 14 days or longer. The injection causes moderate immediate pain plus persistent soreness of 48 hours duration.

Children tolerate penicillin better than adults; however, I am afraid that we are setting the stage for many later allergic reactions to penicillin as our patients grow up. I try not to give penicillin without specific indications, and I keep the patients under observation for 15 minutes after an injection. We add an antihistamine to our penicillin.

In a person suspected or known to be allergic to penicillin we have to use a substitute antibiotic. I usually prefer Ilosone-sulfa combination. I have occasionally had poor responses to Ilosone alone. The sulfonamides alone are not recommended for active treatment, but may be well used in prophylaxis. Some authors recommend a combination of erythromycin and tetracycline. I have used the combination preparations such as Panalba, Signemycin, and Taomid in preference to a single antibiotic. I am especially afraid to prescribe tetracycline alone because of the danger of interposed staphylococcus enteritis. I do not often use Chloromycetin and Declomycin in office practice.

In treating a child with suspected streptococcal pharyngitis I routinely prescribe immediate prophylactic treatment for the other children in the household. Children under 16 years of age are more susceptible to these infections than are adults. This may be a controversial subject, but I seldom see a second infection in a sibling after several days of adequate prophylactic treatment. I usually prescribe one of the long acting sulfonamides in full dosage, once a day for five or six days.

NONBACTERIAL PHARYNGITIS

Many viruses may cause pharyngitis alone or may involve the pharynx as part of a more generalized infection. Early cases of measles and infectious mononucleosis may be mistaken for streptococcal infections. These diseases can be better identified after a few days.

During epidemics we sometimes believe that we can clinically diagnose herpangina caused by the Coxsackie virus and pharyngoconjunctival fever due to the adenovirus. We can more easily make the diagnosis of herpetic gingivostomatitis when the lesions spread from the pharynx to the front of the mouth to involve the gums and tongue.

USE OF ANTIBIOTICS

It is questionable how much antibiotic treatment should be done in these viral infections. The viral infection may be accompanied by or followed by bacterial invasion. Parents can hardly "sweat out" some of these infections without knowledge that the child is getting an antibiotic. At times an antibiotic is prescribed in the hope of preventing secondary infections and complications. Of course, the latter should be treated as indicated.

Infectious mononucleosis appears to respond to treatment with tetracycline alone or in combination with steroids. I prefer to use Signemycin for the first week and may later use steroids if the child is not doing well. I am afraid to use steroids

at the beginning of the illness and I wait until the child has had time to develop an immunologic response. ★★★

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MONKEY BUSINESS

Gangsters' nicknames have long enlivened the Chicago scene, but a new twist is the court motion of James "The Monk" Allegretti, accused of hijacking a truckload of whiskey, objecting that his sobriquet in the indictment constitutes an unconstitutional attack upon his religion.

Federal attorneys filed an answering brief which noted that the government was informed that "Monk" as applied to the defendant refers to "a class of simian vertebrates commonly known as monkeys" and that it is considered appropriate by his friends because of his habit of scratching himself "in a manner reminiscent of those simian characteristics."

So far no intervening petition has been filed by the simians, not even asking to be "a friend of the court." Nor has any objection been filed by another defendant in the case, one Frank "Hot Dog" Lisciandrello.

Carcinoma of the Cervix: Treatment and Follow-Up

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Jackson, Mississippi

Intraepithelial carcinoma of the cervix may be treated by hysterectomy or conservatively in the younger woman by conization. Invasive carcinoma is generally treated by radiation but surgery is used in selected patients with Stage I disease. Techniques of operation and radiation therapy in use at the University Medical Center are described. Cooperation between all physicians concerned is essential during and after treatment. The routine of follow-up examinations and methods of detecting recurrence are discussed. In the management of recurrent carcinoma both reirradiation and radical surgery can occasionally be effective; chemotherapy at present has little to offer.

In the May issue of Journal MSMA[1] the principles of diagnosis and patient evaluation in carcinoma of the cervix were discussed with emphasis on the necessity of cooperation between the various physicians concerned in the early stages of management. The objective of the present report is to outline treatment and follow-up in this disease.

INTRAEPITHELIAL CARCINOMA

When the diagnosis of intraepithelial carcinoma has been established and invasive cancer has been excluded, treatment is indicated since this lesion is likely to progress in months or years to invasive carcinoma.[2] On the other hand, since the basement membrane is not broken, treatment need not be so radical as that for invasive carcinoma. Two commonly accepted methods are by total hysterectomy, or conservatively, by conization of the cervix. When radiation is used, present knowledge suggests that a full cancerocidal dose is necessary. This is more time consuming and carries a greater risk of complications than either of the two methods described above. Lesser amounts of radiation have been used by Nolan,[3] but the long-term effectiveness and critical dosage of these are uncertain.

For the woman who has completed her family and is over 30 years of age (occasionally under 30), hysterectomy is advisable. This should be a total hysterectomy and may be done abdominally or vaginally. The ovaries may be preserved, if normal, but the upper 1 to 2 cm. of vaginal cuff should be removed because of the possibility that the atypical epithelial changes may be multicentric. This type of treatment has been found to be very satisfactory and is virtually 100 per cent successful.[4]

When the patient is anxious to have children or is under 30 years of age, conservative measures may be used. In this case, the original conization may be sufficient, if it was wide enough, or reconization may be performed. In any case, it is essential that the patient be followed carefully. A reasonable plan is to perform cytologic and, if available, colposcopic studies every three months for the first year and every six months thereafter. Biopsy of suspicious areas and/or reconization may be advisable. A real question arises as to what to do when such a patient, being followed, has had her family. The general rule should probably be observed that hysterectomy is not indicated unless there is current evidence of malignant or

From the Departments of Obstetrics and Gynecology and of Radiology and from the Tumor Clinic, University of Mississippi School of Medicine.

highly suspicious intraepithelial change. Provided that the follow-up is consistent and careful, patients who have had adequate conservative management do well and recurrences are infrequent.[5]

INVASIVE SQUAMOUS-CELL CARCINOMA

Before the discovery of radiation various surgical procedures more extensive than the ordinary hysterectomy were devised for the treatment of carcinoma of the cervix.[6] These fell into disuse in this country as knowledge of the relative simplicity and effectiveness of radiation techniques became available. In certain parts of Europe surgical treatment continued, but these were in the minority. The reintroduction of the surgical approach in the United States by Meigs[7] in the 1940's has led to a wider interest in these techniques.

At present a sober evaluation indicates that radiation remains the standard form of therapy. Surgery may have a place in two situations: (1) early invasive carcinoma, when the cervix alone is involved, and (2) carcinoma resistant to or recurrent following radiation therapy. In addition, it is clear that neither radiation nor surgery provides the final answer in the management of this disease. As yet, chemotherapy has little to offer. However, it is possible that in the future newer and more effective techniques will become available.

On the Pelvic Cancer Service at the University Hospital primary treatment is by radiation for patients with Stage II, III, and IV lesions and for certain patients with Stage I lesions. Surgery is suggested only for selected patients with Stage I disease who are good operative risks.

Our radiation treatment consists first of external therapy with the cobalt unit followed by the application of radium to the cervix, usually in a single dose. For Stages I, II, and III external therapy is given through four ports, two anterior and two posterior with a 3 cm. central gap. For Stage IV two large ports, one anterior and one posterior, are used. The Ernst applicator is usually employed for the insertion of radium. It is loaded with 80 mg. radium for Stage I and 90 mg. for Stage II and III and some Stage IV lesions. Generally, radium is not applied to advanced Stage IV lesions because, owing to the extent of the disease, treatment is considered merely palliative. Occasionally it is impractical to use the Ernst applicator because of the shape of the vagina, or, as in carcinoma of the cervical stump, because of the length of the cervical canal. Then a plastic stem and/or ovoids are used. Modifications in therapy may have to be made to suit individual cases. However, an attempt is made to deliver specific amounts of radiation to fixed points in the pelvis, the so-called points A and B. Point A is located 2 cm. lateral to the center of the cervical canal and 2 cm. above the external os of the cervix. Point B is located 3 cm. lateral to point A and the same distance above the external os. Table I illustrates our present plan of radiation dosage.

TABLE I

RADIATION PLAN FOR TREATMENT OF CERVICAL CARCINOMA

University Medical Center, Jackson, Mississippi

	*Radium**		*Cobalt*		*Total*	
Stage	A	B	A	B	A	B
I	4520	1610	3255	3500	7775	5110
II	5550	1800	3720	4000	9270	5800
III	5550	1800	3720	4000	9270	5800
IV	**	**	3500	3500	3500+	3500+

Field Size (not including penumbra):
Stage I, II, III—2 anterior and 2 posterior opposing 6 x 14 cm. ports with a 3 cm. midline separation.
Stage IV—1 anterior and 1 posterior opposing 15 x 18 cm. ports.

* Radium is applied in Ernst applicators after cobalt therapy; 5760 mg. hrs. given to Stage I cases and 6480 mg. hrs. to Stage II and III cases. Overall treatment time for cobalt teletherapy and radium is 40 days.

** Radium as indicated in the form of ovoids, needles, or other technics.

When primary operative treatment is used in Stage I cases the procedure involves removal of the uterus, both tubes and ovaries, the parametrial and paracervical tissues and the upper one-third to one-half of the vagina and paravaginal tissue. In addition, the pelvic lymph nodes are excised from the bifurcation of the aorta to the inguinal ligament. Two points about this operation require emphasis. First, lesser procedures have no place in the management of cancer which has definitely invaded the cervical stroma, since at this point it is impossible to tell whether or not it has spread widely into the parametria. Moreover, there is about a 15 per cent chance that it will have reached the pelvic lymph nodes. Complete and wide excision is therefore necessary. Secondly, this operation requires adequate anesthesia, facilities for blood replacement and careful postoperative care. It should not be attempted by the inexperienced operator under unsatisfactory conditions.

Interest has been shown recently in combined surgical and radiation therapy. This usually con-

sists of applying radium to the cervix, or perhaps giving a full course of radiation therapy, and subsequently performing a hysterectomy, which is of either the simple or the radical type. It is our feeling at present that primary treatment should consist either of surgery or of radiation and not of both. To date, evidence is lacking that combined primary treatment gives a substantially higher survival rate. Therefore, it would seem advisable to retain an effective mode of therapy in case the tumor proves resistant or recurs.

ADENOCARCINOMA, ADENOACANTHOMA, AND SARCOMA

Adenocarcinoma comprises about 5 per cent of cancers of the cervix. Occasionally a combined form occurs—adenoacanthoma—in which the adenomatous elements undergo squamous metaplasia. Very rarely two primary lesions, a squamous cell carcinoma and an adenocarcinoma, may be present. It has been our practice to stage and treat these lesions in the same way as squamous cell carcinomas. Sarcoma is quite rare and does not usually respond to radiation. Primary operative treatment is indicated. As with sarcoma of the body of the uterus, even radical procedures may be ineffective.

MANAGEMENT OF THE PATIENT DURING THERAPY

Treatment will be less effective if the patient does not cooperate. For surgical treatment, it is essential that the patient have an understanding of her disease and the magnitude of the procedure she is to undergo. However, once her general condition is satisfactory and she accepts the idea of operation, then surgical treatment is a relatively short-term affair. It is more important for the patient to cooperate fully during the protracted period of radiation therapy.

Since cobalt therapy may last for three to five weeks, we are most concerned about the patient's reaction and behavior during this time. Failure to cooperate may be because the patient does not understand her problem or because she does not feel well. In the first instance, three main principles underlie management. First, the patient should be given ample opportunity to comprehend her diagnosis. It is sometimes better if the patient herself can ask whether she has cancer and receive a straightforward answer, rather than that she be told this directly by her physician. Secondly, the patient needs to understand the course of therapy. In particular, she needs to know the length of time involved, and to realize, if she is in the reproductive age, that treatment will result in the cessation of menstruation and sterility. Finally, reassurance on the part of all physicians involved in her care is essential. While the gravity of the disease and the strength of therapy should not be underestimated, there is no point in listing in advance every minor complication which might occur.

Lack of cooperation due to the fact that the patient does not feel well may be obviated in the first instance by the preliminary studies which indicate the patient's general condition. It is important to emphasize diet, particularly a high protein intake, during therapy. A blood count, consisting of hemoglobin, hematocrit, and white count should be determined each week during treatment and appropriate vitamins and iron given routinely and augmented if necessary. Careful questioning of the patient during therapy with regard to intestinal, urinary, or genital symptoms will enable her to be given appropriate medication. This attention of details of therapy will in itself contribute greatly to her confidence and sense of well-being.

FOLLOW-UP

Cooperation between physicians and between physician and patient is just as important after as before or during treatment. If more than one physician has been responsible for the patient's care, then it must be clearly understood to whom the patient should return later. This also implies that the physician who sees the patient must inform his colleague(s) of the patient's progress. Good communication is essential to good care. This is particularly important in handling private patients. In our Tumor Clinic, on the other hand, patients are seen by the same service—Gynecology—though not necessarily by the same person for their follow-up visits. Consultation with radiotherapists and, if necessary, chemotherapists is held weekly at a specific time during Tumor Clinic hours. Thus, problem cases may be fully discussed. Follow-up and coordination lie in the hands of the administrative staff of the Clinic and can be very effective when handled in this way.

Discussion with the patient when she is discharged following the completion of therapy is very important. First, she needs to be fully informed—as far as she is capable of understanding—of what has been done and of the delayed treatment responses which might occur. Second, she needs to know the physical changes to expect and how to deal with them; for example, the occurrence of discharge and the necessity of vinegar or

other douches to control it. Third, she should be given ample reassurance and an opportunity to ask questions. Last, and most important, she must be made to realize the importance of adequate check-up examinations, especially to whom to go and when to report. Emphasis should be on the importance of checking on the continued effect of treatment rather than on the detection of recurrence.

Recurrence (or persistence of growth) in carcinoma of the cervix most frequently appears within two years of treatment.[8] Most of the complications of therapy arise during this time. Therefore, follow-up here must be particularly close but should be continued carefully later. Ideally, the patient should be seen every month during the first year following treatment, every two months during the second year, every three months during the third year, every six months during the fourth and fifth years and yearly thereafter. In practice, this schedule may not be possible for various reasons. Under these circumstances the University Hospital Tumor Clinic attempts to see patients one month after the conclusion of therapy, then every three months for two years, every six months for the third year and yearly thereafter.

At each follow-up examination a definite routine is followed. The patient is weighed and her temperature, pulse, and respirations taken and recorded. A brief history is taken with particular reference to the areas likely to be involved in complications or recurrence. Examples of symptoms due to complications are loin pain (indicating pyelitis or ureteral obstruction), frequency, urgency, and hematuria (indicating radiation cystitis), tenesmus or rectal bleeding (indicating radiation proctitis), or unusual vaginal discharge (indicating a severe radiation vaginitis or perhaps a fistula). Symptoms of recurrence are general weakness or malaise, pain in the back and down one or both legs, especially at night, or swelling of one or both legs—the latter two possibly indicating involvement of the lateral pelvic wall. A general examination is performed if indicated. A careful pelvic examination is performed and includes direct visualization of the vagina and cervix, a vagino-abdominal examination and a recto-vagino-abdominal examination. It is extremely helpful during follow-up to make rough diagrams of the findings on pelvic examination and to compare them with those made before and during treatment.

The detection of resistant or recurrent tumor and the separation of symptoms due to complications from those due to recurrence is extremely difficult. Much depends upon the experience of the examiner in interpreting the whole picture.[9] Symptoms themselves can be misleading. On pelvic examination parametrial induration may be either rubbery and smooth—commonly due to radiation—or hard and nodular—possibly due to recurrence. Obvious increase in size of a mass is very suggestive of recurrence. Routine cytologic examinations are at present of little help in following these patients especially for several months following radiation therapy. Punch biopsy of suspicious areas is the most satisfactory way of obtaining evidence of recurrence. However, modern methods of therapy are such that the cervix receives a heavy dose of radiation and local recurrence is not common. The site at which recurrence does occur may not be accessible to biopsy. On rare occasions, needle biopsy of the parametrium can be of value. Sometimes, it is necessary to resort to exploratory laparotomy to prove the presence or absence of recurrence and in considering this one must weigh the possible advantages of future therapy with the chance that nothing more can be done for the patient.

RECURRENT CARCINOMA

In general, it is desirable to have pathological evidence of recurrence before considering further treatment. However, in certain instances the clinical findings of obvious extension or increase in size of a mass may be such as to indicate altering or adding to the current therapy. In any case, combined evaluation by the radiotherapist and gynecologist is indicated when lack of response or recurrence is suspected or proven, since these are grave situations which require careful handling.

Possible methods of treating recurrence are by additional radiation, by radical surgery, or by chemotherapy. Reirradiation may be of value when previous treatment has been inadequate or when the recurrent tumor is at a site not previously treated. When an adequate dose of radiation has been given and recurrent tumor is found in the same area, further radiation cannot offer much. Overall results with repeated radiation show some successes, but these are infrequent.[10] In certain instances, however, this may be worthwhile. It is particularly important to obtain exact details of the patient's previous treatment.

Radical surgery consists of a radical hysterectomy or an exenteration, whether anterior, posterior, or total. If a radical hysterectomy alone can be performed, the chance of five year survival may be as high as 40-50 per cent and the mortality is

low. When an exenteration is necessary there is an appreciable operative mortality and a five year survival rate of 20 to 25 per cent. Both of these are major procedures and require extensive hospital facilities. Since it is very difficult to be sure of the extent of involvement preoperatively, most patients have to be prepared for the possibility of an exenteration. Radical surgery for recurrence should not be offered to the patient unless she has (1) histological evidence of recurrence, (2) a reasonable chance of cure from the procedure, (3) the ability to understand and accept, at least to a certain extent, the procedure being offered, and (4) the socioeconomic circumstances which will enable her to take care of herself and her stomata following operation. Under these circumstances radical surgery may offer the patient her only chance of survival and may, on this account, be extremely valuable.

Chemotherapy has as yet no specific agent to offer the patient with recurrent carcinoma of the cervix. Testosterone or its derivatives may be of value in improving the patient's sense of well-being. It may be worthwhile in certain instances and under adequate supervision to use less toxic chemotherapeutic agents such as chlorambucil or the adrenal cortical steroids.

The patient with recurrent carcinoma represents in many ways one of the physician's most difficult tasks. To provide her with some encouragement, to improve her mood, to keep her comfortable and relatively free of pain, and to support her family, these are the main objectives. When the diagnosis is certain and the end near, extraordinary and heroic medical and surgical measures are not indicated. The greater qualities of patience, sympathy, and kindness are needed.

SUMMARY

1. The primary management of intraepithelial and invasive carcinoma of the cervix is outlined.

2. The cooperative approach to handling patients during and immediately after treatment and during follow-up is emphasized.

3. The management of patients with persistent or recurrent carcinoma of the cervix is discussed. ★★★

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TRANQUIL TRIAL

The Supreme Court of the State of Washington has ordered a new trial for a defendant, convicted of first degree murder and sentenced to death, who was given tranquilizer pills before his trial by a medical trusty in the jail. The court ruled that the defendant's casual, cool, and somewhat lackadaisical attitude and appearance, induced by the pills, in the face of the murder charge, might have been a factor in leading the jury to decide on the death penalty.

Thoracic Outlet Compression: The Role of Anterior Scalenotomy

DOUGLAS H. RIDDELL, M.D.
Nashville, Tennessee

Neurovascular compression at the exit of the brachial plexus and subclavian vessels from the isthmus of the root of the neck has come to be termed "thoracic outlet syndrome." The author discusses the role of anterior scalenotomy in managing this disorder. He concludes that patients with subjective evidence only of thoracic outlet compression are not as likely to receive relief of symptoms from operative intervention as are patients with objective signs. Objective evidence of neurovascular compression, he writes, allows operative intervention with relief of compression and alleviation of symptoms. The author reports data secured in the study of 53 patients subjected to anterior scalenotomy.

Pain in the upper extremity is frequently difficult to evaluate and explain. Neurovascular compression at the exit of the brachial plexus and subclavian vessels from the isthmus of the root of the neck has been termed by some as the "thoracic outlet syndrome." In many instances this pain cannot be attributed to any structural deformity, but again symptoms may be explained by a cervical rib, the scalenus anticus muscle, anomalous fibrous bands, the scalenus medius muscle, and occasionally the subclavius muscle or tendon.

THORACIC OUTLET SYNDROME

In 1935 Ochsner and De Bakey[6] stressed that a hypertrophic or spastic scalenus anticus muscle could produce symptoms by displacing the neurovascular structures of the thoracic outlet without the presence of a cervical rib. Some surgeons have felt that division of the anterior scalene muscle alone relieved this compression and nothing else was necessary even in the presence of a cervical rib. Recently, however, excision of the cervical rib has been thought to be essential if clinical evidence of neurovascular compression is present. The scalenus anticus syndrome and cervical rib compression produce identical clinical pictures. Numbness, pain, or paresthesia are present in the hands and fingers of the affected side. The ulnar portion of the forearm and hand are more likely to be involved and abduction of the arm usually aggravates symptoms and obliterates the radial pulse. Patients in the middle-aged group are apparently affected more frequently.

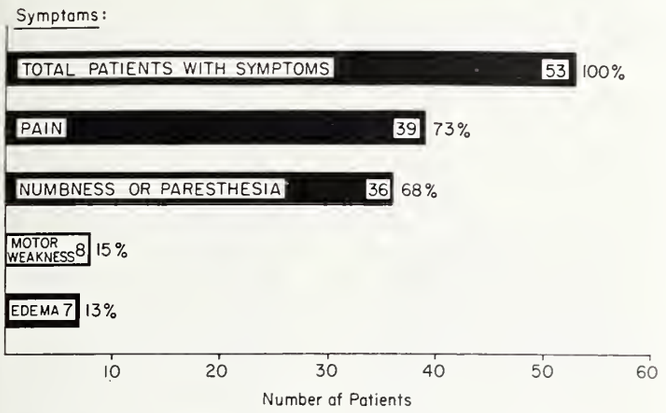
It is an accepted fact that many of these patients presenting symptoms without a cervical rib may be treated successfully by conservative aims, principally those of relieving muscle spasm and pain. Falconer and Weddell[1] described the "costoclavicular syndrome" in 1943 with symptoms identical with scalenus anticus or cervical rib compression but frequently accompanied by Raynaud's phenomena. Venous obstruction may be found also in costoclavicular compression and may be demonstrated by venography.

DIFFERENTIAL DIAGNOSIS

Herniation of a nucleus pulposus of the cervical spine may produce symptoms very similar to those usually attributed to the scalenus anticus muscle. In the former, however, extension of the neck, coughing, or sneezing may aggravate the pain. Arterial or venous compression cannot be demonstrated with the herniated cervical disc but

From the Department of Surgery, Vanderbilt University School of Medicine.
Read before the 74th Semi-annual Meeting of the Delta Medical Society, Belzoni, October 12, 1960.

some spasm of the scalene muscles may be produced secondarily which further confuses the diagnosis. The radial portion of the hand, the precordium, and the shoulder are frequently the sites of radicular pain associated with a herniated cer-

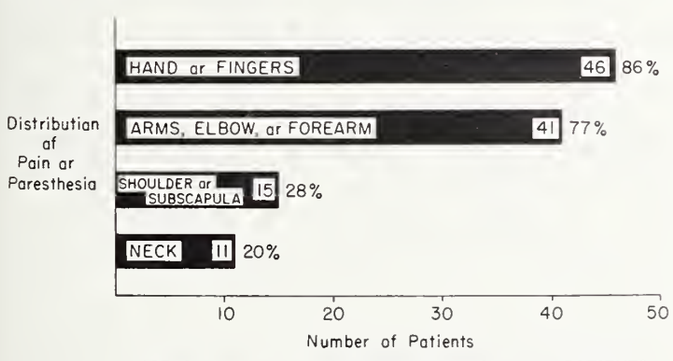


SYMPTOMS IN 53 PATIENTS WITH THORACIC OUTLET COMPRESSION

Figure 1. From Surgery 47:115, 1960. Copyright 1960 by C. V. Mosby Company, 3207 Washington Boulevard, St. Louis 3, Mo. Reprinted by permission.

vical disc. The superior sulcus syndrome (Pancoast) and cervical osteoarthritis may produce symptoms which are easily confused with that of scalenus anticus compression. Since cervical ribs occur in approximately 0.6 per cent of the population they can be unjustly implicated. The occasional occurrence of thrombosis or poststenotic aneurysms of the subclavian artery distal to the cervical rib makes the removal of the rib obligatory even if symptoms are only mild.

Of the numerous patients who have been seen with various symptoms in the upper extremity, 53 patients have been subjected to anterior scalenotomy during the past 15 years. Riddell and Kirtley[7] have reported these patients in detail previously. Most of the 53 patients had an anterior scalenotomy alone while the remaining ones had

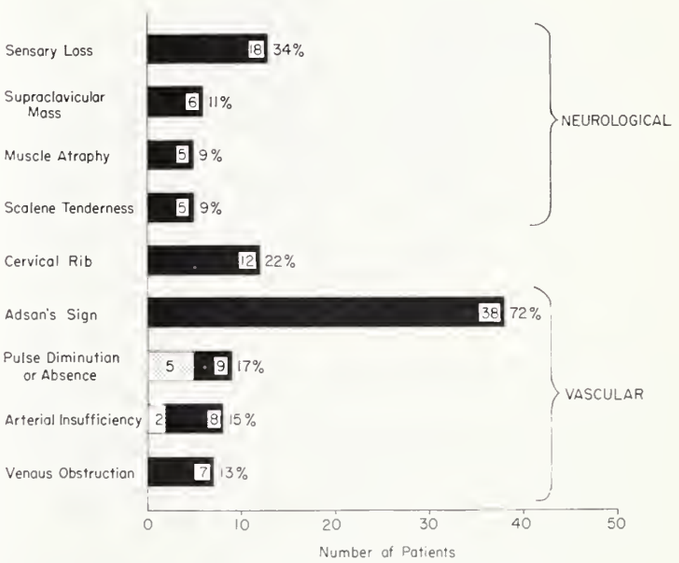


DISTRIBUTION OF PAIN OR PARESTHESIA IN 53 PATIENTS

Figure 2. From Surgery 47:115, 1960. Copyright 1960 by C. V. Mosby Company, 3207 Washington Boulevard, St. Louis 3, Mo. Reprinted by permission.

scalenotomy together with some other procedure aimed at relieving compression at the thoracic outlet. Included in this group also are seven patients who had evidence of venous obstruction in this area. Three general categories were found in these 53 patients. Group I is composed of 34 patients with evidence of scalenus anticus compression without the presence of a cervical rib. Group II is made up of 12 patients with similar symptoms in whom a cervical rib was found. Group III is comprised of seven patients in whom subclavian vein obstruction was the presenting problem with both anterior scalenotomy and excision of the subclavius muscle and tendon being required.

The mean age of the 53 patients was 37.7 years. The right upper extremity was involved in 15 patients while the left was symptomatic in only 31.



OBJECTIVE FINDINGS IN 53 PATIENTS

Figure 3. From Surgery 47:115, 1960. Copyright 1960 by C. V. Mosby Company, 3207 Washington Boulevard, St. Louis 3, Mo. Reprinted by permission.

Seven patients had evidence of bilateral neurovascular compression.

The duration of symptoms varied from two weeks to 15 years with a mean duration of 27.5 months. Pain was the most common symptom (39 patients) being either radicular or aching in character (Fig. 1). Numbness and tingling occurred in 36 patients. Either was present without the other occasionally. The hand and fingers were involved with pain or paresthesia more often than the arm or elbow (Fig. 2). Shoulder and subscapular symptoms occurred in 15 patients.

Objective findings were the greatest aid in arriving at a decision for operative treatment (Fig. 3). This particular point needs to be stressed. Some objective evidence of vascular compression

was present in 44 patients (83 per cent). Adson's maneuver produced a definite change in the radial pulse in 38 patients while a persistent absence or diminution of the radial pulse was present in nine. Arterial spasm was present in eight cases. Arterial spasm initiated by long-standing extrinsic pressure on the wall of the subclavian artery was stressed by Leriche[3] and it may be severe enough

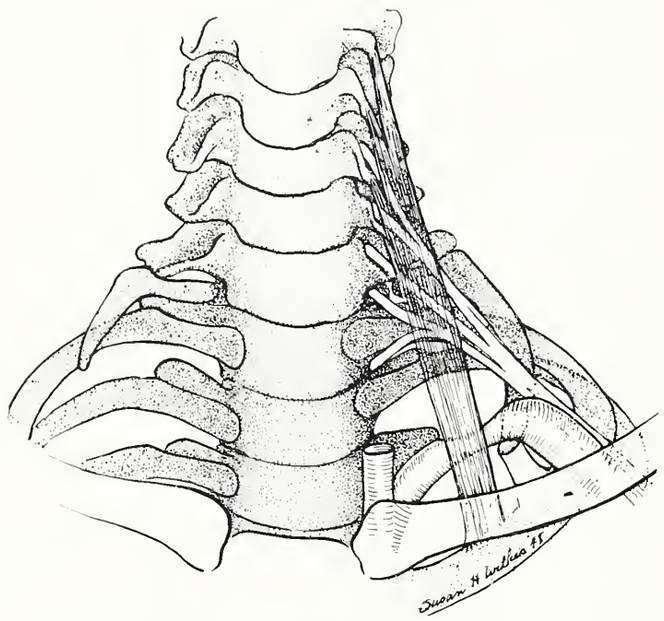


Figure 4. Cervical rib with compression of brachial plexus and poststenotic dilatation of subclavian artery. From Surgery 47:115, 1960. Copyright 1960 by C. V. Mosby Company, 3207 Washington Boulevard, St. Louis 3, Mo. Reprinted by permission.

to cause complete obliteration of the radial pulse.

Table I reveals the operative findings in the 53 patients. Abnormal anatomic variation of the scalenus anticus muscle occurred in three patients

TABLE 1

OPERATIVE FINDINGS IN 53 PATIENTS

	Number of Patients
1. Cervical rib	12
2. Compression of subclavian artery	13
3. Compression of brachial plexus	11
4. Compression of subclavian vein	7
5. Elongated transverse process (C7)	2
6. Fibrous band	2
7. Abnormal scalenus anticus	3
8. Abnormal scalenus medius	1
9. Incorporation of nerve or artery in scalenus	2
10. Poststenotic dilatation of subclavian artery	4
11. Thrombosis of subclavian artery, bilateral	1

with tendinous incorporation of the subclavian artery. None of the four patients with poststenotic dilatation of the subclavian artery has progressed to an aneurysm or required further treatment. One patient with subclavian artery thrombosis required a by-pass arterial graft.

TABLE 11

PROCEDURES IN 53 PATIENTS

	Number of Patients
1. Anterior scalenotomy (all patients)	53
2. Excision of cervical rib	10
3. Excision of subclavius muscle	7
4. Anterior scalenotomy with preservation of cervical rib	2
5. Cervicodorsal sympathectomy	5
6. Excision of transverse process (C7)	2
7. Excision of fibrous band	2
8. Anterior and middle scalenotomy	1
9. Resection of first and second ribs	1
10. Arterial graft (bypass)	1

The various operative procedures in Table II varied. Anterior scalenotomy was carried out in all of the 53 patients. It is interesting that although cervical ribs were present in 12 patients a removal of the rib was done in only 10 instances.

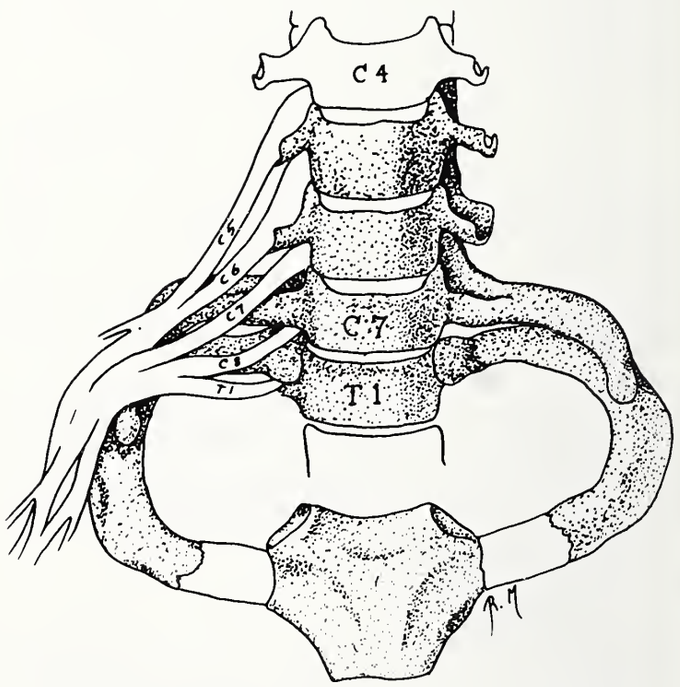


Figure 5. Long transverse process of seventh cervical vertebra with nerve root compression. From Surgery 47:115, 1960. Copyright 1960 by C. V. Mosby Company, 3207 Washington Boulevard, St. Louis 3, Mo. Reprinted by permission.

These two patients were operated on several years ago and undoubtedly at the present time the cervical rib would be resected.

Of the 42 patients followed in Groups I and II who were presumed to have artery or nerve compression, there are 33 patients (80 per cent) who have good results. Eight patients continue to have moderate symptoms, but this is disabling in only one patient. Eleven patients of the 12 in Group II with a cervical rib were followed and a satisfactory relief of symptoms has been present in each case. Six of the seven patients with subclavian vein compression have received relief from symptoms following subclavius muscle and tendon removal together with scalenotomy. It is interesting that the two patients who had preservation of the cervical rib also had good results. In one of these patients the rib was quite short and did not make contact with the artery or brachial plexus trunks. A long cervical rib was present in the other patient but the anterior scalenotomy apparently allowed the first rib to descend enough to relieve compression. The cervical rib undoubtedly presents a hazard for the present or the future so that its removal is justified in all symptomatic cases.

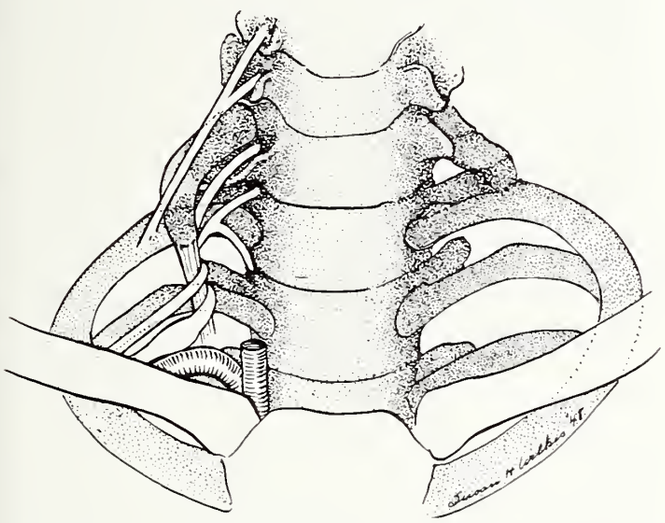


Figure 6. Fibrous band extending from cervical rib to first rib. From Surgery 47:115, 1960. Copyright 1960 by C. V. Mosby Company, 3207 Washington Boulevard, St. Louis 3, Mo. Reprinted by permission.

SYMPTOM DURATION

While the average duration of symptoms in the preoperative period was 27.5 months for the entire group of 53 patients, the average duration was only 4.2 months for those eight patients who have had some persistence of symptoms. This indicates that a more careful preoperative evaluation and repeated examinations of patients with such symptoms may eliminate more of the undesirable candidates for operation.

The application of cervicodorsal sympathectomy in this group of patients resulted in only five patients having sympathectomy in addition to scalenotomy. Three of these had sympathectomy at the time of scalenotomy and through the same incision. Only one of these five patients had a cervical rib but all had rather marked objective vascular signs or changes. All of the five patients were benefited by sympathectomies.

FALCONER-WEDDELL STUDIES

Falconer and Weddell[1] have separated costoclavicular compression from the scalenus anticus syndrome. This is demonstrated by the downward and backward thrust of the shoulder exerting pressure on the subclavian artery and vein from the closure of the angle between the clavicle and first rib. Lord[4] feels that this area is the major source of difficulty in most patients with thoracic outlet compression. From our experience it appears that venous occlusion is more likely to be found with costoclavicular compression while artery and nerve compression are more likely to occur at the scalene triangle.

SUMMARY AND CONCLUSIONS

It appears that patients with subjective evidence only of thoracic outlet compression are not as likely to receive relief of symptoms from operative intervention as are patients with objective signs. Only three of the 53 patients in this series had subjective evidence alone and two of these patients did not receive relief of their symptoms.

Subjective evidence alone of thoracic outlet compression appears to be an inadequate indication for operative treatment. Objective evidence of neurovascular compression, however, allows operative intervention with relief of compression and alleviation of symptoms. It is advisable to remove the cervical rib when symptoms attributable to neurovascular compression are present. Thorough exploration of the entire thoracic outlet area is necessary to assure acceptable results. Careful preoperative evaluation with objective signs may reduce the number of unsatisfactory results following operation. ★★★

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EXPLODED THEORY

The U. S. Army has recently exploded the long held theory that humans need more food in cold weather than in hot.

In the experiments, eight healthy men were kept on a regulated daily physical activity program and allowed to eat all they wanted at mealtime during three 10-day periods—first in the hot sun at 105 degrees, then in the hot shade at 104, and finally in an air-conditioned room at 78. Findings:

- Combined food "intakes" (food eaten and body tissue "burned") represented an increase of 1,320 calories per day for the hot period over the cool period.
- Fluid and nitrogen balance and body composition proved that the increased intake was due to an increase in water in the body, which even exceeded the caloric gain. Researchers reported that the subjects actually lost body tissue during the hot period, metabolizing it to supplement the already increased food consumption needed to satisfy the body's greater energy requirements.

—The Insider's Newsletter

Summer Health of Children

J. CAMPBELL GILLILAND, M.D.
Jackson, Mississippi

The author discusses children's health problems which are peculiar to summer under the topics of animal bites, mosquito bites, stings, fire ant bites, rhus dermatitis, snake bites, and ear infections. Symptoms and treatment are considered.

SUMMER HEALTH OF CHILDREN, in addition to the usual diseases of children and well child care, encompasses a number of disease entities and problems which are characteristic of this season. Of importance is the management of dog bites, insect bites and stings, and rhus dermatitis.

ANIMAL BITES

Surprisingly, only one to five cases of rabies in animals are reported yearly in the state. There is an increased awareness of this disease in other species, such as the fox, bat, and skunk, primarily because of a relative decrease of rabies in dogs. Identification and apprehension of the animal and the treatment of the wound are the primary factors in the prevention of rabies in man.

Preferably, the animal's health should be evaluated at the time of the bite and for the succeeding 10 days by a qualified veterinarian. If the animal is healthy after 10 days, the possibility of rabies is eliminated except in bats. In such a case the bat should be killed immediately for examination and treatment started.[3]

Local treatment should routinely be carried out as soon as possible and should consist of free bleeding without trauma and thorough cleansing of the wound with soapy water or Aqueous Zephiran. Local infiltration of up to 5 cc. of Antirabies Serum (Lederle) is recommended for bites from known rabid animals. The use of prophylactic penicillin has been suggested to decrease secondary infection, particularly from Pasteurella septica.[7] Eradication of secondary invaders will enhance healing and avoid scarring. Tetanus antitoxin or toxoid should be appropriately administered.

The nature of the exposure will determine the appropriate therapy. A lick from a rabid animal on intact skin is *not* considered exposure. It is considered exposure if the lick is over freshly abraded skin. Dry crusted abrasions are considered intact skin. Multiple deep wounds or wounds of the head or neck are considered severe types of exposure.

Hyperimmune Antirabies Serum is a horse serum and patients should be skin tested before its administration. This product is not 100 per cent effective but generally is found to prolong the incubation period. It is estimated that 10 to 20 per cent of patients will develop serum sickness from its use. The Antirabies Serum should be given in a dosage of 0.5 cc. per kg. within the first 72 hours after exposure. The relatively new Rabies Vaccine (Lilly), which is grown in duck embryo and then killed, is antigenically comparable to the vaccine from brain tissue (Semple Method), but lacks the central nervous system complications. Thus far, there have been no reports of any type of neurological reaction following the use of the duck-embryo vaccine.[6]

In severe types of exposure, treatment should consist of a single dose of Antirabies Serum. If this serum is not available, administration of the vaccine should be started. Vaccine therapy may be discontinued if the biting animal is normal five days after exposure, provided the animal remains healthy during the 10 day period. Antirabies Serum, followed by 21 days of vaccine, should be given following severe exposure from a rabid animal. No treatment is required following mild exposure from a normal animal providing the animal remains healthy throughout the 10 day observation period. Following mild exposure from a

rabid animal, 14 days of vaccine is the preferred treatment. Antirabies Serum may be given in cases of mild exposure if indicated.

MOSQUITO BITES

As long as there are children, there will be mosquito bites during the summer months. The primary treatment is directed toward relief of the itching and prevention of secondary infection. Parents should be instructed to clip the fingernails and to bathe the child with an agent containing hexachlorophene such as Dial soap or Phisohex. Elixir of Benadryl is helpful in reducing itching, and its sedative effect is desirable. More potent antipruritic action may be found by using one of the phenothiazine derivatives such as Temaril, but one should be careful to avoid overdosage.

Should secondary infection become apparent,

TABLE I

GUIDE FOR SPECIFIC POSTEXPOSURE TREATMENT

Nature of Exposure		*Status of Biting Animal* AT TIME OF EXPOSURE	*Status of Biting Animal* DURING OBSERVATION PERIOD OF 10 DAYS	*Recommended Treatment (In Addition to Local Treatment)**
I. No lesion; indirect contact only		rabid	—	none
II. Licks:	(1) unabraded skin	rabid	—	none
		(a) healthy	healthy	none
	(2) abraded skin, scratches, and abraded or unabraded mucosa	(b) healthy	clinical signs of rabies or proved rabid	start vaccine at first sign of rabies in animal
		(c) signs suggestive of rabies	healthy	start vaccine immediately; stop treatment if animal is normal on fifth day after exposure
		(d) rabid, escaped, killed, or unknown	—	start vaccine immediately
III. Bites:	(1) mild exposure	(a) healthy	healthy	none
		(b) healthy	clinical signs of rabies or proved rabid	start vaccine at first sign of rabies in animal
		(c) signs suggestive of rabies	healthy	start vaccine immediately; stop treatment if animal is normal on fifth day after exposure
		(d) rabid, escaped, killed, or unknown; or any bite by wolf, jackal, fox, bat, or other wild animal	—	start vaccine immediately
	(2) severe exposure (multiple; or face, head or neck bites)	(a) healthy	healthy	hyperimmune serum immediately; no vaccine as long as animal remains normal
		(b) healthy	clinical signs of rabies or proved rabid	hyperimmune serum immediately; start vaccine at first sign of rabies
		(c) signs suggestive of rabies	healthy	hyperimmune serum immediately, followed by vaccine; vaccine may be stopped if animal is normal on fifth day after exposure
		(d) rabid, escaped, killed, or unknown; any bite by wild animal	—	hyperimmune serum immediately, followed by vaccine

From World Health Organization, 1953.

* This table is only a guide; certain circumstances may justify its modification.

Note: The above schedule applies equally well whether or not the biting animal has been previously vaccinated.

topical use of an antibiotic ointment such as bacitracin or neomycin is helpful. Penicillin ointments are always contraindicated. Keep in mind that the streptococcus as well as the staphylococcus may be the secondary source of infection. This is specifically mentioned because of the incidence of acute glomerulonephritis following streptococcal impetigo.

STINGS

Stings from bees, wasps, and yellow jackets are, for the most part, managed similarly to mosquito bites. The local application of cold compresses or ethyl chloride spray is helpful in reducing swelling and slowing the absorption of the toxin. The systemic use of an antihistamine frequently helps in the reduction of swelling, particularly in stings near the eye. The worker bee's stinger usually remains in the wound; therefore, careful examination of the site should be carried out in all cases. Removal of the stinger is advised because it is a foreign body, and because the venom sac is frequently attached with the stinger. In removing the stinger, care should be taken to avoid manipulation of this sac since it is possible to introduce more venom into the wound. Children found hypersensitive to such stings should be skin tested and desensitized by a qualified allergist.

FIRE ANT BITES

Actually, the wound inflicted by the fire ant is both a bite and a sting. The ant attaches its head to the skin producing a bite and then stings producing pain and a wheal. Local treatment is virtually ineffective since the natural course of such a wound involves wheal formation, vesiculation, and pustule formation, followed by frequent scarring. General measures such as nail clipping and thorough cleansing are helpful in preventing secondary infection. Children should be protected from such bites because pain and systemic symptoms such as fever and allergic manifestations are quite real. It is a simple matter to destroy this pest by pouring boiling water or applying an insecticide to the ant mound.

RHUS DERMATITIS

The most common cause of dermatitis venenata in children remains the age old contact with the antigens of poison ivy, poison oak, and poison sumac. In order to produce dermatitis, the juices of the plant must contact the skin either directly or indirectly via clothing, smoke from the burning plant, or other ways. Almost anyone is susceptible if exposed to enough antigen over a long enough period. The degree of local reaction is proportional to the individual's sensitivity and the amount of exposure. The rash usually occurs one to two days after exposure and persists for five to 10 days.

Local treatment has been uniformly unsuccessful in shortening the course of the disease. Washing after five minutes in a highly sensitive person or after 30 minutes in a mildly sensitive person does little to prevent the occurrence of the dermatitis. The parenteral or oral use of the various extracts is helpful in producing *temporary* hyposensitization. No permanent type of desensitization can be expected, and a maintenance dose is required.[2] These extracts should be temporarily discontinued if the patient develops dermatitis during the course of hyposensitization.

Local treatment with Burow's compresses or one of the many lotions may offer some symptomatic relief, but the course of the disease remains unaffected. The systemic use of steroids has scored the greatest success in the management of rhus dermatitis. It is recommended the drug be given for a period of four to five days after which time the patient usually will have recovered. Should symptoms recur, administration of the steroid should be resumed for another three to four days. Very little adrenal suppression is noted with such short term therapy.

SNAKE BITES

The water moccasin, copperhead, and the rattlesnake are the most common sources of snake bite in the southeastern states. The venom from these snakes is hematoxic, cytolytic, and to a lesser extent neurotoxic. The severity of symptoms depends upon the location of the bite, the depth of the bite, the size of the snake, the degree of activity following the bite, and the time interval before treatment is begun.

Specific treatment involves the local and systemic use of antivenom. Tetanus antitoxin or toxoid should routinely be given. The patient should be hospitalized and closely observed for the development of shock or hemolytic crisis. Blood for typing and crossmatching should be obtained immediately since later hemolysis may interfere with these procedures.

There remains a wide diversity of opinion as to management of the local wound. Presently, it is the general feeling that suction and local incision have little to offer in effectively reducing the amount of toxin absorbed. Immobilization of the affected part and the application of ice packs are helpful in reducing pain and swelling. Antihistamines are contraindicated.

EAR INFECTIONS

Due to greater participation in swimming, an increased number of infections of the external

ear is generally observed in the summer. These infections are usually fungal or bacterial in origin. Fungus infections are frequently asymptomatic, but itching and occasionally pain (from secondary cellulitis) are not uncommon. The most common offenders are Aspergillus niger, a gray-black mold, Aspergillus flavus, a yellow-brown mold, and Verticillium graphii, a green colored mold.

Treatment consists of producing a relatively dry environment within the canal and eradication of the fungus. Both results are usually obtained by using a 2 per cent salicylic acid solution in ethanol. Secondary infection is best controlled by the topical application of an antibiotic ear solution such as Neosporin or Otobiotic and the judicious administration of systemic antibiotics when the severity of the disease indicates.

Otitis externa (swimmer's ear) is frequently ascribed to a fungus but usually is bacterial in origin. Symptoms of local pain, fever, and pain on movement of the ear are common. Examination of the canal reveals a diffuse cellulitis. Treatment consists of the local application of warm Burow's solution several times daily, topical use of a steroid-antibiotic ear solution, such as Otobione or Cortisporin, and the systemic use of a broad spectrum antibiotic. The patient should not be allowed in swimming until the infection has completely cleared. The use of swimming caps and ear plugs is helpful in reducing repeated attacks, but the recurrence rate remains high. ★★★

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RIGHT TO LOAF

Insider's Newsletter reports this hard luck note from our Northern neighbor. Canada's National Revenue Minister, George Nowlan, recently received a complaining letter from a constituent who said that he had worked all last spring, summer, and fall, and then had gone on relief. The complaint: When he had gone to collect his relief check, the unemployment office had offered him a job.

Hypofibrinogenemia in Certain Obstetrical Conditions

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Decreased clotting ability of the blood due to fibrinogen deficiency may be encountered in certain cases of missed abortion, abruptio placenta, and other instances of unusual bleeding in obstetrical cases. The author discusses the mechanism of blood coagulation and the etiology of hypofibrinogenemia in obstetrical crises. He reports treatment procedure and two studies.

AFIBRINOGENEMIA AND HYPOFIBRINOGENEMIA are terms which indicate a clinically significant deficiency of fibrinogen in the blood. This is a rare cause of hemorrhage in general.[1] There is a congenital form in which there are hemorrhagic manifestations from infancy, due to inborn error of fibrinogen formation.

ACCOMPANYING CONDITIONS

Acquired fibrinogen deficiency has been observed with severe liver damage, malignant disease, infections, diseases of the bone marrow, and nutritional deficiencies. Severe liver damage causes impairment of prothrombin production before fibrinogen deficiency, essentially a terminal event, occurs.

In certain instances fibrinogen lack is seen in shock, transfusion reactions, severe burns, anaphylactoid reactions, and in association with carcinoma of the prostate or pancreas. These cases are attributed to the activity of abnormal proteolytic enzymes.[1]

The subject of blood coagulation is quite complicated and the explanation of its mechanism changes constantly with the addition of new information. Briefly, three elements are involved in hemostasis in the living patient: vessel wall, blood platelets, and blood plasma. Trauma results in the contraction of damaged vessels. This is probably dependent in part on liberation of a vasoconstrictor substance (serotonin) from the platelets. Platelets may also serve as mechanical plugs at the site of injury, contribute thromboplastin to the clotting process, and through their critical effect on clot retraction, influence firmness of the clot. Thus, coagulation is the result of a series of complicated biochemical reactions.

To summarize: Thromboplastin plus calcium plus prothrombin produces thrombin; thrombin plus fibrinogen results in fibrin and a clot.

Clinically speaking, the obstetrical conditions of missed abortion, dead fetus, and abruptio placenta are the ones sometimes associated with fibrinogen deficiency and hemorrhage in excess of the amount ordinarily encountered in these cases. Amniotic fluid embolism is also listed as an infrequent cause of afibrinogenemia.

THEORY OF ETIOLOGY

The common theory of etiology of hypofibrinogenemia in these cases is that it results from excessive liberation of thromboplastin from the placenta and decidua which is then forced into the maternal circulation. The conversion of fibrinogen to fibrin is considered to occur along the blood vessel walls in the maternal circulatory system. This deposit is later thought to be removed by fibrinolysin.[2] It has been suggested that this process is accomplished by hydrolysis of the fibrinogen.[3]

Stouffer and Ashworth[4] say that hypofibrinogenemia results from a constant process of laying

down of fibrin in the intervillous spaces of the placenta in the dead fetus syndrome and from local deposition of fibrin at the site of placental separation in cases of abruptio placenta.

Diagnosis of hypofibrinogenemia requires that it be anticipated and checked for particularly in abruptio placenta and missed abortion, and also in other cases of obstetrical hemorrhage which are not controlled by the usual measures.

SUGGESTED PROCEDURE

Ferguson[5] has suggested that the following procedure be adopted in all cases of suspected abruptio placenta, missed abortion, and other unusual obstetrical bleeding:

1. Five to 10 cc. of venous blood is collected in a test tube and watched for rapidity of clot formation. Comparison is made with a control specimen. After the clot forms, the tube is gently inverted every few minutes, and the stability of the clot is compared with that of the control. This test is repeated every hour until danger is past.

2. A qualitative fibrinogen test (fibrindex) is done at once and is repeated as necessary when there is evidence of deficient clotting in the initial test. As a guide to therapy, this test is often sufficient in conjunction with clinical judgment.

3. When the preceding tests indicate a deficiency of fibrinogen, a quantitative test, if available, may be done, expressing fibrinogen in milligrams per cent. Less than 150 mg. per cent is below normal. This method allows for more accurate therapy, but may not be available or may be too time-consuming for immediate help.

MANAGEMENT

Ferguson further states that if anyone of the above tests is abnormal, at least 2 gm. of fibrinogen should be given intravenously, even if there is no evidence of abnormal bleeding. He has found that when these results were ignored, abnormal bleeding eventually occurred. The dose of fibrinogen is the amount necessary to control evidence of abnormal bleeding. Other sites of bleeding besides the uterus are at venopunctures, gingiva, and incisions. Anywhere from 2 to 10 gm. may be needed to effect control.

In most cases with minimal or moderate fibrinogen depression, multiple transfusions are necessary to restore blood volume and these in themselves often restore the blood fibrinogen to adequate levels. Each 500 cc. of fresh blood has approximately 1 gm. of fibrinogen. In severe deficiency, however, transfused blood may not supply fibrinogen in a sufficiently concentrated form to be effective following dilution by the patient's fibrinogen-poor blood.

PRITCHARD'S CONCLUSIONS

Pritchard in discussing the report of Stouffer and Ashworth[6] says that in cases when fibrinogen is given to correct hypofibrinogenemia, it is important to be sure that a clinically significant deficiency is present, that is, 125 mg. per cent or less. When the blood level is above 50 mg. per cent, give 3 gm., and when it is below 50 mg. per cent, give 4 gm.

Pritchard and Ratnoff[6] noted the development of hypofibrinogenemia in eight of 31 women who were undelivered three or more weeks after fetal death occurred. Patients with missed abortion should be considered candidates for hypofibrinogenemia. Once the diagnosis of intrauterine fetal death is made, the patient should report bleeding from any site—vagina, mouth, nose, rectum, or beneath the skin. Plasma fibrinogen studies should be done weekly beginning at least three weeks after fetal death occurs.

FIBRINOGEN DETERMINATIONS

If the plasma fibrinogen level drops below 150 mg. per cent, the uterus should be emptied by the most expeditious means. Fibrinogen should be given just before the time of delivery in absence of any bleeding tendency. Should any bleeding tendency occur prior to this, fibrinogen should be given immediately. Two to 4 gm. should be given intravenously. Those patients whose pregnancies are to be terminated by abdominal or pelvic surgery should be given fibrinogen immediately before operation is begun. Whole blood should be given for immediate blood replacement, and oxytocics should be used as indicated. It should be pointed out that commercial fibrinogen may contain hepatitis virus, and its administration should not be regarded lightly nor should it be haphazardly prescribed.

Patients with missed abortions should have a fibrinogen determination immediately before the time of emptying the uterus. Once the uterus is emptied, plasma fibrinogen recovery is usually normal or near normal 24 hours after removal of the products of conception.

Phillips, Montgomery, and Taylor[3] reported 10 cases of hypofibrinogenemia occurring at the Sloane Hospital for Women during the period January, 1954 to April, 1955. There were five cases of premature separation of the placenta, and one each of placenta previa, dilation and curettage for incomplete abortion, elective cesarean section, manual removal of placenta, and a case of ruptured uterus and bladder. Eight of the 10 cases were given fibrinogen therapy when they did not appear to be responding to the more conservative measures of whole blood and oxytocics. After fibrinogen therapy was instituted, bleeding usually showed a marked decrease within 30 to 60 minutes.

DYER-MCCAUGHEY STUDY

Dyer and McCaughey[7] summarized their study of 39,076 women delivered during a period from Jan. 1, 1946 to Dec. 31, 1955. There were 214 cases of severe abruptio placenta. Clotting defect was severe enough to require the administration of fibrinogen to 16 patients or 7.4 per cent. The average amount given was 2.6 gm. The least dose was 1.0 gm., and the maximum required to correct the clotting defect was 11.0 gm. The incidence of severe clotting defect was 10 per cent in all cases of abruptio placenta observed by these authors.

In summary, decreased clotting ability of the blood due to fibrinogen deficiency may be encountered in certain cases of missed abortion and abruptio placenta. In cases of this type, it is recommended that a tube of blood be drawn on admission for observation of its clotting qualities. When this appears abnormal, the fibrindex test should be done.

As the indicated obstetrical treatment of these conditions is carried out, hemorrhage may occur which is out of proportion to that usually observed. It may fail to respond to the transfusion of blood and administration of oxytocics. This should suggest hypofibrinogenemia and the administration of fibrinogen in adequate dosage.

Two factors limit the use of fibrinogen therapy to cases with definite deficiency. One is the danger of transmission of hepatitis virus; the other is the expensiveness of the treatment (about $50 per gram or $150 to $200 for the usual dosage). ★★★

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TAX FACTS

Tax Court has ruled that a "Medical Seminar" taken aboard a luxury liner from New York to Venice does not qualify for a full educational deduction. The court held that since the doctor spent only an hour a day attending lectures, the cruise was primarily personal and gave him only a $232 deduction rather than the $1,880 he had claimed.

Clinicopathological Conference XVII

Conducted by the Department of Pathology
University of Mississippi School of Medicine
Jackson, Mississippi

Dr. Blair E. Batson: "This patient, a 20-month-old colored female from Greenville, was admitted on Oct. 20, 1960, to the University Medical Center for the first time. The chief complaint was that she was 'unable to walk for six days.'

"The patient was apparently well until May 21, 1960, at which time she fell off of her back porch striking her right occipital region on a broken coke bottle. She was admitted to the hospital in Greenville with multiple depressed fractures of her right occipital region and was operated on at that time. The dura was sutured in two areas. The brain itself did not appear to be disturbed. All depressed areas were elevated. Her hospital course was uneventful and she was discharged in six or seven days. So apparently this was a straightforward uncomplicated traumatic lesion.

The patient in June's CPC is a 20-month-old colored female who was admitted to the University Medical Center with the chief complaints of ataxia and severe headache. The patient was apparently well until three months before when she had fallen off her back porch striking her right occipital region on a broken coke bottle. This injury was repaired with no apparent complications. About a week after admission to UMC, the child died a respiratory death. Discussers are Dr. Blair E. Batson, Dr. Robert D. Sloan, Dr. Julian Youmans, and Dr. John A. Gronvall.

SECOND ADMISSION

"On Oct. 8, 1960, having done well in the interim, she was again admitted to the hospital in Greenville with what appeared to be aseptic meningitis. She had fever of unstated degree and moderate nuchal rigidity. A spinal tap revealed 37 lymphocytes, 55 mg. per cent sugar, and 170 mg. per cent protein. At that time the most possible diagnosis was, of course, aseptic meningitis or meningo-encephalitis. The causes are almost too legion to mention here. Many are viral in nature, and an increasing number of viruses are being shown to be etiological agents.

"I would like to comment at this point that for the cerebrospinal fluid of a child who had been sick for six days with encephalitis the amount of protein mentioned here is somewhat on the high side. Although patients with encephalitis can have a CSF protein concentration in this range, it is not the usual range. It is much more likely to be normal or only slightly elevated.

"The next thing that I would think about in this age child would be the possibility of tuberculous meningitis. It is true that most children with tuberculous meningitis do have a decreased spinal fluid sugar. However, we have had in the last year on our own service a patient who had many of the signs and symptoms of tuberculous meningitis with a normal sugar and yet who turned out without question to have tuberculous meningitis. I discussed the matter with Dr. Edwin L. Kendig, Jr. He checked his records and found some cases with tuberculous meningitis who had normal spinal fluid sugars for quite some time after the onset of the disease.[1]

PETERSDORF'S EXPERIMENT

"This brings up the very interesting bit of work that has been done recently by Petersdorf.[2] In a series of well-conceived and executed experiments, he has shown that the belief that bacteria are the sole cause of lowering of glucose in the CSF is not true. Dogs rendered leukopenic by radiation were given pneumococcal meningitis. They had many bacteria in the CSF but no cells;

the glucose concentration remained unchanged. When saline was injected into the spinal fluid to cause cerebral spinal fluid pleocytosis, the glucose concentration did not go down. However, when pneumococci were injected intracisternally, the spinal fluid sugar began to go down within three hours. The problem seemed to be settled. But then he injected killed pneumococci and the CSF sugar concentration was lowered also. When soluble purified bacterial endotoxin was injected similarly in dogs with CSF pleocytosis, the CSF glucose concentration was lowered too.

RESULTS OF STUDY

"These studies show clearly that phagocytizing white cells in the CSF utilize glucose more avidly than resting cells. The final solution may be more complex, but it does help perhaps to point to the fact that CSF sugar concentration can sometimes be low in patients whose CSF contains tumor cells and who have pleocytosis only as a reaction to a malignant process. If these circumstances are kept in mind, we must remember that CSF sugar may be normal in the presence of pleocytosis unless there is some stimulus for the cells to actively phagocytize.

BRAIN ABSCESS POSSIBILITY

"The other diagnosis that crossed my mind at this time was brain abscess because of the year old story of trauma to her skull and dura. I think it would be distinctly unusual and rare for a year to elapse before any symptoms would be noted. Of course, it is quite possible that she has had mild symptoms that were passed off as intermittent colds or bronchitis or something else giving her fever. Of course, she could have a brain abscess unrelated to the previous trauma and is just now giving symptoms. The fourth possibility that came to mind was the possibility of a brain tumor involving the meninges and giving rise to pleocytosis and to increased CSF protein, a circumstance which occurs in some types of tumor more than in others. Also, early bacterial meningitis was thought of; however, the CSF culture was negative.

"She was treated symptomatically, and I assume that means that she was not given antibiotics or steroids. Her temperature became normal in 24 hours. She remained asymptomatic and afebrile and was discharged after four days of hospitalization.

"A PPD skin test done at this time was negative. A negative skin test in a patient who might have tuberculous meningitis certainly is significant in that it does tend to lead us away from this diagnosis. There are instances in which patients with this disease might have a negative PPD. This is usually in the patient in whom the infection is so overwhelming that it interferes with the hypersensitivity reaction of the patient to the tubercle bacillus. These patients are usually quite ill and often terminal. In such patients one might expect a negative PPD but not in an infant who seemed only mildly ill.

"Another possibility remains. Hypersensitivity to the TB organism does not develop until four to 10 weeks after infection is initiated. Therefore it is conceivable, but not likely, that the patient was infected with the tubercle bacillus, had developed meningitis, but had not yet developed hypersensitivity.

ACUTE ATAXIA ONSET

"The patient continued to do well until Oct. 18, 1960, 10 days after her previous admission and nine days after the time her temperature became normal. She was readmitted then because of ataxia, fever, and a severe headache of two days' duration. The acute onset of ataxia in a small child provokes several thoughts. I would like to mention first what I think she probably did not have; namely, acute cerebellar ataxia of childhood.

"Not infrequently in our own hospital and throughout the country children who apparently have been completely well are appearing with signs of acute cerebellar ataxia, either with or without fever. Most of our cases have been in preschool age children. They often show other signs of central nervous system involvement, but they may show ataxia alone and no abnormal CSF findings. Then for some time the Pediatric Service and the Neurosurgical Service puzzle over whether the patient has acute cerebellar ataxia or whether he has a brain tumor. In acute cerebellar ataxia, improvement usually begins within one to three weeks. So usually one can wait a short period of time before initiating studies to find a brain tumor unless there is some overwhelming reason such as papilledema present. The recurrent nature of the symptoms in this child would make me feel that she did not have this disease.

McALLISTER'S REPORT

"McAllister[3] recently reported the isolations of Type 9 ECHO virus from one case of acute cerebellar ataxia. It has been also described in relationship to some of the other viral diseases,

influenza A and B, polio virus type 1, post measles encephalitis and others.

"The other thing that occurred to me that had not occurred to me earlier in the course was the possibility of acute labyrinthitis. A 20-month-old child is a little difficult to test for unquestionable ataxia. Therefore it is possible that a child who has marked vertigo might seem to have ataxia. Patients with labyrinthitis can have meningeal irritation, and cells can be found in the CSF. There was no evidence apparently here of mastoiditis or otitis media which certainly the patient should have had prior to the development of labyrinthitis. Ataxia points to a cerebellar lesion or to a lesion supratentorially pressing down on the cerebellum.

SEVERE HEADACHE

"Now, I would like to mention this point of severe headache. This is a truly unusual sign in a 20-month-old child. In the first place, most children in this age group cannot say 'my head hurts.' Therefore, the child's symptoms must have been rather striking to the parents. The child probably grabbed its head and screamed out for the parents to be able to make such a definitive statement. Usually this symptom in young children indicates real organic disease with one outstanding exception. In this instance the child has a parent who has sick headaches and has learned to get his way by mimicking the parent. Therefore persistent severe headache in small children is a sign for an immediate investigation as to the etiology.

ADMISSION TO UMC

"This was the first appearance of ataxia. Skull x-rays were taken and were said to be negative except for one defect in the right occipital region as a result of the original fracture. Eye grounds were normal. Thus there is no evidence of papilledema or separated suture which would indicate a serious increase in intracranial pressure. However, the opening CSF pressure was 240 mm. of water which is slightly elevated. The fluid was clear and contained 22 cells, protein was still elevated to 150 mg. per cent, sugar was 73 mg. per cent, and the chloride was 160 mg. per cent. I am not going to discuss the causes of hypernatremia since I would hardly know how to explain 160 mg. per cent chloride except to say that the child must have been overloaded with sodium and given very little water the day before. There was no history of this. Therefore I choose at this time to suggest that this might have been a laboratory error.

"Blood counts on both admissions were perfectly normal. The ataxia was said to have developed over about a 36 hour period. Following this last admission the child was referred to the University Medical Center to the Neurosurgery Service. The patient was initially seen in the emergency room on Oct. 20, 1960, and evaluated by the neurosurgical staff. She was afebrile apparently during the time that she was there except for one rectal temperature reading of 100.4° F.

NEUROLOGICAL EXAMINATION

"Neurological examination at this time revealed normal fundi and intact cranial nerves. The patient was alert and appeared to be able to see and hear. There was generalized decreased muscular tone. I think we must note this hypotonia as an important finding. This may fit with some of the things that I will try to put together in arriving at a final diagnosis. The reflexes were active and symmetrical. A Babinski reflex was not elicited. She had two-beat clonus bilaterally. She moved her legs very little unless peripherally stimulated. I have to interpret this as a manifestation of hypotonia; however, it may be weakness. She could stand alone which indicates that she was not tremendously weak. She would promptly sit down or grab for support. I interpret this as truncal ataxia although it is possible that this was vertigo. It is not stated here whether she had any ataxia of her extremities. She responded to peripheral stimuli over the entire body. The impression at this time was that the patient had either a Guillain-Barre syndrome or poliomyelitis.

TWO DIAGNOSES

"Not having seen the child at this time and since the pediatric staff did not see the child at this time, I can say that from the findings listed here I find it difficult to understand why these diagnoses were considered so seriously. In a true Guillain-Barre syndrome there is a very high CSF protein and no cells and a symmetrical ascending paralysis. In infectious neuronitis, for which many people use the term Guillain-Barre syndrome loosely, the spinal fluid findings are identical to those in this case, but one would expect very definite extremity weakness which is not clearly present in this case. If this child had had poliomyelitis for this period of time, the CSF protein might very well be this high. It is also true that the symptomatology of poliomyelitis may have a two hump curve. During each episode the patient may have stiff neck and fever and there may be CSF

pleocytosis. This is rare, the first episode usually not involving the central nervous system.

HOSPITAL COURSE

"The child was admitted to the emergency room by the Neurosurgical Service and she remained there for three days. She was afebrile and her oral intake remained at least satisfactory. It is not clear in the protocol whether anything was done during those three days. Now at least we advance three days in time, and we find that a subdural and ventricular tap were done. No fluid was found beneath the dura and clear cerebrospinal fluid was removed from the ventricles under very low pressure. This is a significant finding. Certainly if there had been a marked block one would not have expected to find fluid under very low pressure in the ventricle. The fluid contained no cells. Again I simply want to remark to you that if the meninges are involved to the point of producing pleocytosis, the cells are usually found then in the subarachnoid space, in spinal fluid but not in the ventricles. One can have an overwhelming meningitis with thousands of cells in the cerebrospinal fluid and few or no cells in the ventricles. If there are also a large number of cells in the ventricles, then there is a ventriculitis as well.

"On Oct. 23, 1960, the same day, the patient was found to be lying on her abdomen with the head markedly hyper-extended and the back arched. This, too, I think is quite important and indicates irritation at the base of the brain. These findings might constitute a cerebellar 'fit.' Patients with disease or disorder of the cerebellum often have recurrent episodes exactly similar to this. Pediatric consultation was requested, and she was admitted to the Pediatric Service."

LABORATORY DATA

"The hematocrit, white count, and differential were normal. Sickle cell prep was negative. The nonprotein nitrogen was normal and the blood glucose was 129 mg. per cent. I am not quite sure why the glucose was this high. Lumbar puncture revealed an opening pressure of 130 mm., the CSF showed a 1+ Pandy reaction, a glucose greater than 50 mg. per cent, and 35 lymphocytes per cubic mm. These findings are essentially the same as before except that there is now a normal spinal fluid pressure. No organisms were seen on gram stain. Subsequent cultures were negative.

"Urinalysis showed a 1+ albumin, 10 white blood cells, and 10 red blood cells per high power field, 2-3 hyaline casts, and 8-19 granular casts. I am a bit at a loss to explain this. If by any chance the child had been a bit dehydrated, which is denied in the protocol, one would not be worried about such a finding. However, if she were well hydrated this would indicate some stimulus to the kidney. This might be infection or perhaps a generalized systemic disorder involving the kidneys as well as the brain.

"The VDRL was nonreactive. Serum chloride was 98 mEq/L. A serum chloride of 98 mEq/L is on the low side of normal. The CSF chloride is low in tuberculous meningitis. This is only a reflection of lowered serum chlorides, and this in turn is a reflection of the lowered total body chloride. Whether this figure of 98 is a reflection of tuberculosis or is within normal range or is a laboratory error, or is due to a lack of intake of sodium chloride over the last day or two, I can not say from the information at hand. Chest x-ray was said to be unsatisfactory. Dr. Sloan, will you discuss the x-rays."

X-RAY REPORT

Dr. Robert D. Sloan: "A chest film was obtained when the child was in the emergency room. This appears perfectly normal, save for a suggestion of some hilar calcification on the right. If this observation is valid it would suggest the residual of an infectious process such as tuberculosis or histoplasmosis, although the negative skin tests are somewhat disturbing. Routine films of the skull were obtained, and these appear normal save for a small defect on the right occipital area secondary to the earlier skull fractures and surgery. The borders of this bony defect are innocent in appearance. There is no widening of the sutures or other evidence of increased intracranial pressure."

Dr. Batson: "Skin tests for tuberculosis, histoplasmosis, coccidiomycosis, and blastomycosis were all negative. Following the spinal puncture that was done apparently on Oct. 23 or 24 the patient became markedly improved, with more relaxation and less irritability and no nuchal rigidity or opisthotonus. However, all these symptoms returned 30 minutes following the procedure. On Oct. 26, 1960, a repeat lumbar puncture was performed. The opening pressure was 150 mm. and increased to 270 mm. with a Queckenstedt maneuver. Thus, CSF pressure was again shown to be within normal limits and no block to CSF flow was shown. Other findings in the CSF were essentially unchanged. On the same day the patient vomited several times. Apparently she had not vomited prior to this.

"On the morning of the next day it is said that the patient seemed to be more alert and had no nuchal rigidity or hyperextension. However, she



Figure 1

had Cheyne-Stokes respirations. She had developed sustained ankle clonus on the right and up to 10 beats on the left. On the afternoon of Oct. 27, 1960, the patient became semicomatose and was noted to have increasing difficulty handling her respiratory secretions. Whether this was from the comatose state or whether this was bulbar involvement or both would be impossible for me to say.

ELECTROENCEPHALOGRAM

"An electroencephalogram was done at this time. It was interpreted as being grossly abnormal. There was a diffuse slow (delta) dysrhythmia awake and asleep and much very slow activity awake. There was a temporal amplitude asymmetry, the right being higher than the left. There was focal, irregular, slow and short activity in the right temporal region. If a patient has a skull defect, the EEG can be biased considerably because there is no dampening effect of the bone itself in that area. However, Dr. F. J. Moore, who interpreted this EEG, pointed out that one would not expect a focal slow wave as seen here but would expect more likely a fast focus and perhaps more spiking. Dr. Moore's impression was that the right temporal focal activity was 'organized' which would make a subacute or chronic process more likely. The extreme asymmetry and disorganization was considered to be a poor sign although not representing a coma record. He certainly was correct, the patient died not very long thereafter.

"A neurology consultation had been obtained the day before. The neurologist felt that the present illness was not related to the skull injury in May 1960. He also was of the opinion that the overall picture, clinically and laboratory-wise, fitted that of a meningo-encephalitis, bacterial meningitis being ruled out on the basis of CSF studies and the subacute course. The consensus at the time was that TB meningitis could not be ruled out and that viral meningo-encephalitis was the best possibility.

DIAGNOSTIC PROBABILITIES

"First, I will say that I think the lesion is in the cerebellum and that it is a tumor. The child initially had an episode which could have been meningo-encephalitis, but the subsequent course, being well for a period of time and then becoming ill again, certainly does not fit the picture of the usual acute viral encephalitis. Most of the cases of degenerative encephalopathy that have been described do not follow such an acute course, although it is possible. I have seen a child die within two weeks of the onset of symptoms of an acute degenerative episode; such patients may have CSF pleocytosis and a high protein. As a rule there is gradual and more generalized deterioration. Therefore I do not think she has such a disorder.

"The possibility of infratentorial tumor is suggested by the signs of cerebellar involvement. This patient had truncal ataxia; whether she had extremity ataxia is not stated. If she did have truncal ataxia alone, this finding, together with the other cerebellar signs, would be those found in the usual case of medulloblastoma of the cerebellum. Medulloblastoma notoriously invades the meninges, giving rise to a high CSF protein and

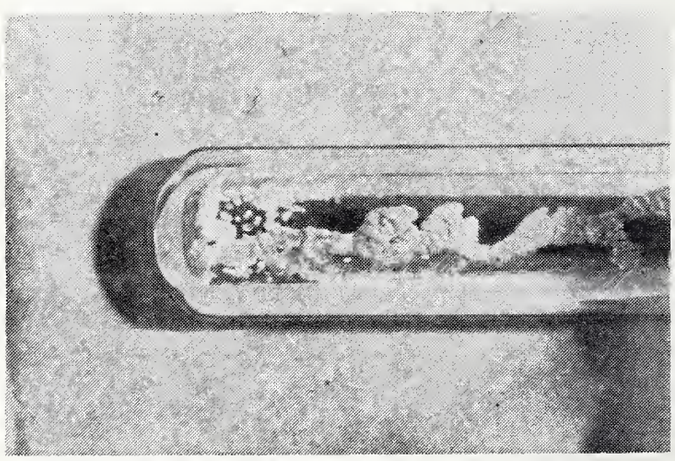


Figure 2

pleocytosis, often of considerable degree. This tumor quite often causes considerable pain, the cause being involvement of the meninges or stretching of the meninges. I would like to emphasize at this point that the most severe headache comes from involvement of meninges and the blood vessels rather than from increased intracranial pressure itself. This child had severe headache but no increase in intracranial pressure. This point also seems to be in favor of tumor invading the meninges. This child had hypotonia which is a not infrequent finding in cerebellar disease. There were several episodes which might have been cerebllar 'fits.' Therefore, my diagnosis is medulloblastoma. I have asked Dr. Julian Youmans to comment on this case."

AGREEMENT ON ESSENTIALS

Dr. Julian Youmans: "I think that is an excellent presentation. We agree on all the essential points. I am in the same position as Dr. Batson. I was away when this child came in, and I, too, may be in for a big surprise when the pathological findings are presented. One thing I was asked to clarify. The other members of the Neurosurgery Staff told me that they did not suspect Guillain-Barre syndrome or polio as quoted at one point in the protocol. I agree that certainly it is a most unlikely diagnosis. You would not get bilateral clonus with Guillain-Barre syndrome or polio. The picture of polio of the lower motor neurone lesion would not give clonus. I think everyone would agree on this.

"I can see how the patient was handled as he or she was and still agree with Dr. Batson as to the final outcome because the late developments really make the overall picture very good for a space occupying lesion. It is very difficult for me to put together the fact that there seemed not to have been any increased intracranial pressure and yet the child went on to have what I would think to be a herniation of a mass lesion through the foramen magnum and dies a respiratory death because of this. I do not see how we can put it together any other way and be right statistically.

SPACE OCCUPYING LESION

"There is a possibility of a viral encephalitis, but the death seems to be directly related to the lumber punctures timewise and I think that there will be a mass lesion. It would be most important to know in the protocol here whether the opening spinal fluid pressure of 240 as quoted the first time was with the child relaxed or crying. I think it is possible that this is a correct figure and that the lower ones are correct also because the lesion moved down and around the brain stem to produce a partial block to passage of CSF in the posterior fossa. This explains the low pressure readings on the later measurements. Again from the way the child died I believe there almost has to be a space occupying lesion back there."

AUTOPSY FINDINGS

Dr. Batson: "I think the Pediatric Staff who took care of this child thought she had a brain tumor. Is this correct or not?"

Pediatrics: "Yes, the majority of us thought there was a tumor."

Dr. John A. Gronvall: "At autopsy there were essentially no significant findings outside of the brain. No granulomas were found in the hilar nodes, although there could have been a tiny focus of calcification somewhere in the hilum that escaped our observation. When the skull was opened, the surface of the brain appeared swollen and flattened. The cerebral gyri were flattened and the sulci narrowed indicating some increased pressure within the brain. The right cerebellar hemisphere was firmly adherent to the overlying dura in the region of the old depressed skull fracture. The right cerebellar hemisphere was almost completely replaced by a multiloculated cavity containing purulent material. Adjacent to the cavities there was a large amount of friable material replacing the cerebellar tissue, as seen in Figure 1.

MULTILOCULATED CAVITY

"The cavity extended to the surface at the area of fibrous attachment to the dura. Histologically, this lesion consisted of a number of interconnecting abscess cavities filled with polymorphonuclear leukocytes. In addition, there were some poorly defined granulomas with multinucleated giant cells. In specially stained sections, rodlike organisms were found. They were small gram-positive organisms having a diameter about the same as tubercle bacilli, but they were not acid fast. They did not appear to be individual bacilli since one could see long chains which branched and formed a type of filamentous hyphae.

"Cultures from the cerebellum grew out a pure culture of Nocardia asteroides (Fig. 2). The organisms seen histologically are entirely consistent with Nocardia. Morphologically, Nocardia and Actinomyces are very difficult to separate. In tissue Actinomyces generally tends to form so-called sulphur granules which are very prominent colonies that are easily seen in sections. Nocardia will also give rise to these granules, but it does so

much less often and in most cases Nocardia is present in tissue as a disseminated filamentous form such as is present in this case. Culturally, they can be readily distinguished since Actinomyces is anaerobic and Nocardia is an aerobic form. Nocardia is known to be present as a free living organism widely distributed in nature.

"In this case we believe that the Nocardia probably was introduced into the cerebellum at the time of the depressed skull fracture. The organism must have been more or less dormant for six months and then for some unknown reason began to grow, gradually progressing to produce the large abscess. There may be some disagreement as to whether the Nocardia was introduced at the time of the injury. Nocardia can also be inhaled, producing a pulmonary infection from which it can spread to other parts of the body. At autopsy, however, we did not find evidence of infection or granulomas in the lungs."

TONSILAR HERNIATION

Dr. Youmans: "Was there any evidence of tonsilar herniation?"

Dr. Gronvall: "The inferior surface of the cerebellum was quite irregular and was adherent to the dura so in the process of getting it out it was somewhat fragmented, and I do not think that we can say definitely whether there was or not."

Dr. Batson: "If the cerebellum was adherent to the dura, would not this make it difficult for it to herniate?"

Dr. Youmans: "I think it would. But I think it must have herniated terminally. The other thing is the injury was above the tentorium entirely, is that correct?"

Dr. Batson: "The right occipital region. But this fracture shown on the skull films is above the transverse sinus, is it not Dr. Sloan?"

Dr. Sloan: "I thought it was below."

Dr. Gronvall: "It was our impression at the time of autopsy that the fracture was below the tentorium."

TUMOR MIMICRY

Dr. Batson: "This case emphasizes that an indolent infection giving rise to an abscess in an organ may mimic a tumor very closely without giving rise to any of the usual signs and symptoms associated with infection. It is interesting that one child we have seen with pulmonary Nocardiosis did show signs of infection. It should be pointed out also that we have to remind ourselves constantly in this day of antibiotics that we are seeing more and more often infection with organisms that are not commonly pathogenic. The other lesson to be learned from this case is that craniotomy should have been considered much earlier during the hospital stay." ★★★

2500 North State Street

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IF YOU CAN'T DO IT YOURSELF . . .

Switzerland's new aid for heavy smokers who can't cut down: a special case called "Memo Smoke," which has a built-in timing device and a lock. The timer is adjusted so that the lid opens only at fixed intervals—from 10 minutes to two hours. Trial customers report that it's a costly form of self-discipline ($10 for the case) —and you feel a little silly when you want to offer someone else a cigarette but can't get your case open for another 10 minutes.

—The Insider's Newsletter

A Perfect Combination of a General Practitioner And Specialist

JOHN G. ARCHER, M.D.
Greenville, Mississippi

When requested to give this Distinguished Service Oration, a feeling of deep humility encompassed me, and I felt inadequate to undertake such a wonderful assignment. But the realization of having this opportunity to take part in honoring the memory of the man with whom I had been closely associated for 37 years stimulated the desire to make known publicly some of the facts of this modest, kind, gentle, conscientious, untiring physician.

The youngest of seven children, Dr. Paul Gaston Gamble was born to Iva Agnew Gamble and Dr. William Gaston Gamble on June 7, 1882, at their country home seven miles west of Saltillo, Miss. He was the brother of our beloved and nationally known Dr. Hugh Agnew Gamble. He had his grammar school training in Guntown, Miss. He went to McTyere Preparatory School in McKenzie, Tenn., from 1899 to 1901. He spent two years, 1902 and 1903, at Vanderbilt University, Nashville, Tenn. While at Vanderbilt he joined Delta Kappa Epsilon social fraternity.

He had two years in Galveston at the University of Texas Medical School, then he attended Tulane Medical School where he received his medical degree in 1909. He spent two years in internship at Touro Infirmary in New Orleans, La. It was there he was fortunate enough to be under the guidance of the renowned Dr. Rudolph Matas. He did postgraduate work at the New York Postgraduate School of Medicine in New York City. He entered private practice of medicine in 1911 at Greenville, Miss., associated with his brother, Dr. Hugh A. Gamble.

During World War I, he was commissioned a first lieutenant in the Medical Corps and reported to the base in Montgomery, Ala. While on duty there during the summer of 1918, he was married to Miss Mary Lipe of Nashville, Tenn., the girl he had courted during his Vanderbilt days. Their two children, Paul, Jr. and Mary, are greatly admired by all. Paul, Jr., is a successful businessman in Greenville, and Mary, who is affectionately known as "Cece," is married to Dr. Dudley C. Miller and is the mother of two. They live in Nashville, Tenn., her mother's old home.

On Nov. 10, 1918, he was assigned to foreign duty and was on the high seas when the armistice was signed Nov. 11, 1918. He, however, was sent to a military base hospital in France just outside Paris where he was immediately quarantined because of an outbreak of smallpox and was not permitted to return to the United States until June 1919. While in France he was promoted to captain.



Dr. Paul Gaston Gamble, 1882-1957

1961 Distingushed Service Oration.
Member, Board of Trustees, Mississippi State Medical Association.
Read before the House of Delegates, 93rd Annual Session, Mississippi State Medical Association, May 9-11, 1961.

As soon as he received his military discharge he returned to Greenville, again joining his brother, Dr. Hugh A. Gamble, with whom several years later he founded the present Doctors Gamble Brothers and Archer Clinic.

He was a member of the Delta Medical Society, the Mississippi State Medical Association, the American Medical Association, the Southern Medical Association, the American Association of Railway Surgeons, and the Southeastern Urological Association. He was a member of the Mississippi State Board of Health for several years. He served on the board which approved the applications of students applying for state medical scholarships. He also served on one of the medical advisory boards during World War II and in recognition of this service was given a special citation by the governor of Mississippi. He was past-president of the Delta Medical Society and past-president of the Mississippi State Medical Association, 1947-48.

He was a member of the First Presbyterian Church in Greenville. He contributed several articles on surgery and urology, which were published in the respective journals. He loved farming, always deriving a great deal of joy from visiting the Gamble's Plantation in Arkansas. He also had farming interests in the vicinity of Greenville, which was operated on a sharecroppers basis. His chief hobby, however, was his profession.

Dr. Gamble's patients were always first and foremost in his mind and heart. With his marvelous personality he often did more for his patients than the medication administered. His was an enormous practice and his many patients loved him so much that he was affectionally called "Dr. Paul." Their feeling was that if Doctor Paul did not have the power and know-how to meet their needs, there was no one, other than the great Almighty, who could help them in any way. Building up patients' confidence was one of his great attributes.

During the years when so many Italian farmers moved to the Delta, he learned to speak Italian and, by doing so, won the friendship of many families of those who could not speak English. In fact, he soon became their family physician and adviser. Their respect for him never wavered and, I might add, he never let them down—the stranger in a strange land. The amount of charity that he did both in a professional way and from a monetary standpoint, no one will ever know. He was a man who never sought publicity or favors for what he had done for others.

He worked under most adverse conditions in the horse and buggy days and later in Model T Ford days. He worked in shacks with no facilities or in homes better equipped and later in hospitals with the very latest equipment. He was instrumental in helping to build the King's Daughters Hospital and the General Hospital in Greenville. He worked untiringly in the operation of the old Negro King's Daughters Hospital, giving a great deal of his time and skill to the many charity patients there.

He and his wife, with their foresight and financial backing, organized the medical arts group and thereby built the beautiful clinic building occupied now by Doctors Gamble Brothers and Archer Clinic.

He worked untiringly for white and Negroes, for rich and poor, averaging many a night with only three to four hours sleep, never complaining, regardless of the loss of sleep or lack of food. Finally fatigue caught up with him, and he developed myasthenia gravis. Did this slow him down? No, for with the aid of Prostigmin, he continued to carry on. Fortunately this condition did not develop until the last years of his life.

I recall during the Model T Ford days, he became an expert "mud driver" and could go on muddy streets that no one else would attempt for fear of getting stuck. On April 21, 1927, the mighty Mississippi flooded Greenville. He served with other local physicians in taking care of 10,000 people encamped on the levee, as well as those marooned in their homes. Making house calls at that time he used a motor boat and on one occasion in answering a call, his boat stalled. When rescued, it was found that the propeller of his boat had become imbedded in the top of an automobile entirely submerged in the flood waters, but this did not stop him and he continued on his mission.

Dr. Paul's devotion to his work can be attested to by the fact that his fatal illness developed one morning while he was operating. He developed severe pain in his chest but completed the operation. He was immediately admitted to the hospital in a room a few doors from the surgical pavilion. Two days later, on Feb. 8, 1957, when he seemed to be doing nicely, he died very suddenly. Thus ended the career of a great and successful physician, not only professionally, but from a business standpoint also.

With his passing, Doctors Gamble Brothers and Archer Clinic lost its second senior partner, and Greenville and the surrounding community lost a friend, a skilled surgeon, and a character never to be forgotten. ★★★

344 Arnold Avenue

JOURNAL OF THE
MISSISSIPPI STATE
MEDICAL ASSOCIATION

Volume II, Number 6

June 1961

EDITORIALS

A Moment of Soul Searching

W. MONCURE DABNEY, M.D.
Crystal Springs, Mississippi

WITH THE VERY REAL and present threat of total socialization of medicine, it seems to this writer that it would behoove the profession to pause for a moment to consider the attitude of the proposed recipients of government medical care toward the profession today.

Certainly much of the rapport of doctor-patient relationship has been, of necessity, lost since the "horse and buggy" days. But are we earnestly trying to preserve the healthiest relationship possible under the circumstances?

I was impressed at a general practitioners' meeting in California a few years ago when one representative gave a report of hospital facility limitations in his area, and stated that despite much adverse criticism not one doctor was willing to give of his time to the charity program of this hospital.

When we clamor about the astronomical rise in hospital costs, are we in turn earnestly trying to limit their use to those cases actually requiring hospitalization or are we often guilty of hospitalizing patients for our convenience only?

Are we listening sympathetically to those whom we know are unable to pay or are we too brusquely suggesting the closest government maintained clinic?

Are we generously giving of our time and material resources for worthy civic and community undertakings or are we too busily concerned with our personal pleasure and financial well being?

The writer is confident that our case will be viewed more favorably by both the public and the lawmakers if our profession is respected for these reasons as well as for our ability to alleviate the miseries of a physically and mentally suffering population.

LETTERS

SIRS: I must write and congratulate you upon your splendid editorial in the May issue of the JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION "The King Bill: Hoax, Deception, Fraud."

It is a most excellent editorial with which I agree 100 per cent, and I certainly want to sincerely congratulate you upon the excellence of it.

DAVID B. ALLMAN, M.D.
PAST PRESIDENT, AMERICAN
MEDICAL ASSOCIATION
ATLANTIC CITY, NEW JERSEY

SIRS: Allow me to congratulate you on your fine editorial on page 249 of the May issue of our JOURNAL. I feel that you have rendered a service to the physicians of the state by this succinct

analysis of the latest proposal to socialize medicine through the back door.

It certainly provides physicians with meaningful information to include in their letters to congressmen and, as I have done, in my letters to friends and business associates in other professions urging them to write their senators and congressmen in opposition to this and all other socialistic proposals.

ROBERT T. CATES, M.D.
JACKSON, MISSISSIPPI

DEATHS

NEELY, WILKIE N., Harrisville. M.D., Memphis Hospital Medical College, Tenn., 1899; practiced medicine for 62 years in Simpson County; died March 27, 1961, aged 86.

SIGREST, ERNEST AMERICUS, Flora. M.D., Tulane University School of Medicine, New Orleans, La., 1904; surgeon for Illinois Central Railroad in Flora; died March 14, 1961, aged 86.

VERNER, GUY CLIFTON, Jackson. M.D., Emory University School of Medicine, Georgia, 1926; interned Employees Hospital, Fairfield, Ala.; member, American Medical Association and National Pediatric Society; served as major in the Medical Corps during World War II; died March 11, 1961, aged 60.

NEW MEMBERS

The following physicians have been elected to membership by their respective component medical societies in the Mississippi State Medical Association and the American Medical Association:

CLIPPINGER, DAVID LEE, Hazlehurst. Born Lima, Ohio, March 20, 1934; M.D., University of Mississippi School of Medicine, Jackson, 1959; interned Memorial Hospital of Chatham County, Savannah, Ga.; elected Dec. 13, 1960, by Tri-County Medical Society.

COLE, DAVID OWEN, Brookhaven. Born Columbus, Miss., Sept. 4, 1933; M.D., University of Mississippi School of Medicine, Jackson, 1959; interned Mississippi Baptist Hospital, Jackson; elected Sept. 13, 1960, by Tri-County Medical Society.

WILLIAMS, KENNETH OTT, Crosby. Born Osyka, Miss., Nov. 27, 1929; M.D., University of Mississippi School of Medicine, Jackson, 1959; interned Mississippi Baptist Hospital, Jackson; elected Dec. 13, 1960, by Tri-County Medical Society.

State Morbidity Reported Through April 21

The Mississippi State Board of Health reports the following occurrence of morbidity for 1961 through the 16th week of the year, ending April 21. Case totals reported are shown opposite the disease condition.

Tuberculosis, pul.	224
Tuberculosis, O. F.	14
Gas Gangrene	2
Salmonella inf.	2
Brucellosis	3
Dysentery, amebic	6
Dysentery, bacillary	11
Septicemia, NOS	1
Infection, staph.	5
Diphtheria	2
Infection, meningococcal	
Meningitis	8
Meningococcemia	3
Tularemia	7
Tetanus	1
Poliomyelitis (P)	1
Infection, encephalitis	8
Infection, mononucleosis	42
Toxoplasmosis	2
Puerperal sepsis	1
Diarrhea of newborn	2
Hepatitis, inf.	614
Helminthic inf.	
Hookworm	467
Ascariasis	95
Histoplasmosis	15
Meningitis, O. F.	32
Infection, strep.	
Scarlet fever	104
Strep. throat	857
Pertussis	15
Measles	645
Chickenpox	562
Mumps	319
Influenza	329
Gonorrhea	2,035
Syphilis	
Early	102
Late	85

Book Reviews

Surgical Diseases of the Chest. Edited by Brian Blades, M.D., professor of surgery, George Washington University School of Medicine. Cloth, 580 pages with 267 illustrations. St. Louis: C. V. Mosby Company, 1961. $22.00.

This book is the newest and the most informative on thoracic surgical diseases. It will be of much interest to surgeons, but is so planned and written that it will be of real value to medical students and medical practitioners. Blades and his associates wrote eight of the 16 chapters. The other chapters are written by such well-recognized authorities as Langston, Tuttle, Kent, Effler, Harkin, DeBakey and Cooley. These authors were chosen on the basis of wide clinical experience and contribute greatly to the value of the book.

The chapter devoted to basic physiology in thoracic surgery is rewarding reading. A discussion of pulmonary function tests is helpful in evaluating borderline risks. Basic knowledge of cardiac physiology has increased dramatically in the last decade and is accurately reflected. In the postoperative management of the thoracic surgical patient, the need for a clear airway with careful management of tracheobronchial secretions, full re-expansion of all lung tissue with negative intrapleural pressures, and normal position of mediastinal structures is emphasized. The discussion on water-seal drainage will be particularly useful to students.

Since the last war Dr. Blades has been recognized as an outstanding authority on thoracic trauma and the chapter devoted to this is superb. In this day of increasing traffic trauma, this should be required reading for all physicians. The chapter on pulmonary parenchymal lesions is a good one and adequately discusses the chronic suppurative diseases including bronchiectasis, lung abscess and chronic versus conventional and radical pneumonectomy in carcinoma of the lung is given.

The last 15 years has produced dramatic changes in the accepted treatment of pulmonary tuberculosis. Excisional surgery has become the treatment of choice and is presented with emphasis on timing of operation, extent of resection and postoperative management. The chapter on the mediastinum is a splendid one and includes discussion of mediastinal infections and tumors. A broad collection of both common and unusual mediastinal tumors with diagnostic hints is presented. Usual esophageal diseases including diverticulum, achalasia, strictures, and tumors are discussed.

The field of cardiac surgery is such a rapidly expanding one that it is difficult to keep abreast of current developments. The chapter on congenital heart disease evaluates various surgical endeavors and gives a complete discussion of the use of extra corporeal circulation with a pump oxygenator. Surgery for mitral valvular stenosis has become well established and standardized and is beautifully discussed.

The chapter on aneurysms and occlusive disease of the thoracic aorta and great vessels by DeBakey and Cooley is well worth the price of the volume in that it summarizes the tremendous experience of the Houston group, who have had such wealth of clinical material that they are recognized everywhere as authoritative in aortic surgery.

Dr. Blades has dedicated his excellent book to the memory of Dr. Evarts Graham, his former chief. This is entirely fitting since Dr. Graham is the father of modern thoracic surgery. This informative and beautifully illustrated text is indeed a fine memorial to Dr. Graham.

J. Harvey Johnston, Jr., M.D.

Pharmacology: The Nature, Action, and Use of Drugs. By Harry Beckman, M.D., chairman, departments of pharmacology, Marquette University Schools of Medicine and Dentistry. Second Edition. Cloth, 805 pages with illustrations. Philadelphia: W. B. Saunders Company, 1961. $15.50.

Written in the delightful and highly readable style characteristic of Dr. Beckman's previous works, this book furnishes its readers a wealth of pertinent information concerning the use of drugs and the background for same. Although it is intended as a textbook for the undergraduate medical student, the volume should take its place as a ready reference in the library of the busy practicing physician. Essential details of pharmacology are presented and available to those who do not have time to search for them in exhaustive tomes on the subject.

The book is divided into three separate portions. Section I defines briefly the place of pharmacology among the other basic sciences. Section II embraces pharmacologic background with attention to sources of drugs, nature of drug action, and fate of drugs in the human body. Included are chapters of interesting material relating to the development, testing, and naming of new drugs. The final chapter of this section is a very informative discussion of unwanted responses to drugs and contains a table of 100 agents, commonly used in clinical practice, which may produce undesirable reactions.

Section III comprises the major portion of the text and projects a positive approach to the actions and uses of drugs from a therapeutic view. This section is subdivided into broad segments setting forth the pharmacologic aspects of certain tissues, organs, and systems and of selected clinical categories. The effects of drugs on these structures and in such categories are presented in an interesting and concise manner in well-defined chapters. Discussions include current preparations of recent vintage, such as the use of Triparanol in atherosclerosis and the application of tranquilizers, psychomotor stimulants, and psychotomimetics in mood and behavior.

The format and illustrations are excellent. Bibliographies are limited but adequate. A complete index is included, drugs being listed under trade names as well as generic names.

The author has achieved his purpose in preparing a textbook for undergraduate students and has also provided the clinician a highly desirable reference volume.

FREDERICK E. TATUM, M.D.

Domestic Journals

Young Offenders. N. J. London, and J. K. Myers: Arch. Gen. Psychiat. 4:274-282 (March) 1961.

There has been a great deal of interest in juvenile delinquency recently, and this article on juvenile offenders is thus timely. The authors studied 85 male offenders between the ages of 16 and 25 incarcerated in the New Haven County Jail 10 days or more from November 1958 to June 1959. The study was directed toward the social factors in these cases and the type of psychopathology found.

A classification consisting of five categories of social class was used. Class I included families of wealth, high education and occupation, and top rank social prestige. Class II included families with adults generally holding advanced degrees and holding professional or high-level managerial positions. Class III included those with small business, white collar, and sizeable number of skilled workers. Class IV included largely semi-skilled workers with some secondary education. Class V included semi-skilled or unskilled workers with elementary education or less. In cases where the offender was under 20 or had not yet an established occupation, the class score of his parents was used. The offenders in this group were exclusively found to fall in the two lower social strata of Classes IV and V. This suggests a significant relationship between social status and jailed juvenile offenders.

From the standpoint of diagnosis, 30 per cent of the offenders were considered as having no diagnosed psychopathology. The remaining 70 per cent were distributed over only six categories of psychiatric disturbance in the following proportions: passive-aggressive personality (13 per cent), antisocial reaction (38 per cent), sexual deviation (5 per cent), schizophrenia (8 per cent), and mental deficiency (2 per cent). It is of interest that none were diagnosed as suffering from any of the psychoneurotic disorders, and that the most numerous category was that of the antisocial reaction. These juvenile offenders were usually in jail with offenses having to do with stealing. It is somewhat surprising to learn that in this age group even 4 per cent were diagnosable as actually alcoholic.

Another item of interest is that most of the 30 per cent without diagnosable psychiatric disturbance were first offenders while the 70 per cent with diagnosed mental disturbance in the main contained the recidivists.

All the above aspects of the study of juvenile delinquency might be of less general interest if it were not that attempts at treatment of these individuals were made. These attempts indicated (as many might have anticipated) that the brief psychotherapy measures of a clinic in connection with a jail population are most effective with first offenders while the recidivists would better be referred to clinics in the community where they may be continued to be seen over long periods of time.

OSCAR E. HUBBARD, M.D.

House of Delegates Names Dr. Long President, Dr. Crenshaw President-Elect in Its Final Session

In the closing minutes of MSMA's 93rd Annual Session, Dr. Lawrence W. Long of Jackson was inaugurated president and Dr. C. P. Crenshaw of Collins was named president-elect. Dr. Long succeeds Dr. G. Swink Hicks of Natchez.

Vice presidents named by the House of Delegates in its final session were Dr. Joseph L. Guyton of Pontotoc, northern district; Dr. Tom H. Mitchell of Vicksburg, mid-state district, and Dr. A. T. Tatum of Petal, southern district.

Dr. C. G. Sutherland of Jackson was elected secretary-treasurer, and Dr. B. B. O'Mara of Biloxi was re-elected speaker of the House of Delegates. Dr. Howard A. Nelson of Greenwood was renamed vice speaker.

Other physicians named to offices as the association closed its three day meeting were:

Dewitt W. Hamrick, Corinth, associate editor, JOURNAL MSMA; J. P. Culpepper, Jr., Hattiesburg, delegate to AMA; G. Swink Hicks, Natchez, alternate delegate.

John G. Archer, Greenville, district one trustee; Joseph B. Rogers, Oxford, district two trustee, H. H. McClanahan, Jr., district three trustee.

Omar Simmons, Newton, Council on Budget and Finance; E. LeRoy Wilkins, Clarksdale, Council on Medical Education; John B. Howell, Jr., Canton, Council on Constitution and By-Laws; Lamar Arrington, Meridian, Council on Legislation.

Judicial Council: A. T. Tatum, Petal, district seven; G. Swink Hicks, Natchez, district eight; W. J. Weatherford, Pascagoula, district nine.

Council on Medical Service: T. E. Ross, Hattiesburg, district seven; Everett H. Crawford, Tylertown, district eight; Fred C. Minkler, Pascagoula, district nine.

Council on Socioeconomic Affairs: Frank L. Ramsey, Laurel, district seven; Oscar G. Eubanks, Crystal Springs, district eight; S. B. McIlwain, Pascagoula, district nine.

Blue Cross-Blue Shield directors: G. Swink Hicks, Natchez; R. B. Caldwell, Baldwyn; George H. Martin, Vicksburg, and T. E. Ross, Hattiesburg.

Nominated for the State Board of Health, district one: Dewitt W. Hamrick, Corinth; Frank M. Davis, Corinth, and R. B. Caldwell, Baldwyn. Nominated for the State Board of Health, district three: W. T. Wilkins, Clarksdale, Howard A. Nelson, Greenwood, and George F. Archer, Greenville.

Nominated for the Board of Trustees of State Mental Institutions: James G. Thompson, Jackson; S. Lamar Bailey, Kosciusko; C. P. Crenshaw, Collins; G. Swink Hicks, Natchez, and Wendell Holmes, McComb.

Fraternal delegates: J. T. Davis, Corinth, to Alabama; C. W. Patterson, Rosedale, to Arkansas; A. V. Beacham, Magnolia, to Louisiana, and Guy T. Vise, Meridian, to Tennessee.

Earlier in the Thursday House of Delegates meeting, Dr. John G. Archer of Greenville delivered the Distinguished Service Oration which this year honored the late Dr. Paul G. Gamble, former MSMA president and member of the State Board of Health.

In legislative actions, the House

—took an active stand in opposing the enactment of the King-Anderson bill providing for compulsory health care for the aged under the Social Security program,

—enlarged the Council on Legislation from three to nine members, with a representative from all association districts,

—approved and supported the Kerr-Mills program with the qualification that it should be medically oriented rather than welfare oriented,

—authorized a poll of association members as to whether the relative value study should be continued,

—established a commission to study the problems involved in the relation of medicine to optometry,

—opened membership on an associate basis to members of medical faculties of schools approved

by the American Medical Association who are not licensed to practice in Mississippi.

Highlight of the Tuesday House of Delegates meeting was an address by Dr. Leonard W. Larson of Bismarck, N. D., president-elect of the American Medical Association.

"As you well know, the medical profession has equipped itself with a double-edged sword, one side of which is used to battle against the social security method of financing health care for the aged," Dr. Larson told the MSMA delegates.



Dr. W. E. Caldwell, chairman of the Committee on the American Medical Education Foundation, gives Dr. Alton Bryant, vice chancellor of the University of Mississippi, Jackson Medical Campus, a check for $8,654.47 from AMEF.



Dr. Lawrence W. Long of Jackson, 1961 president-elect, awards Dr. Frank M. Davis a certificate for outstanding work with membership.

"The other side of our sword must be used to cleave through the enemy's obfuscations and win wide acceptance for the Kerr-Mills law, a program which the medical profession wholeheartedly supports and one which is designed to provide care for these aged patients who really need it," Dr. Larson said.

"We know . . . that if the social security scheme —personified in the King bill—goes through, our needy aged will be denied necessary care, and that the federal government will successfully entangle medical science in a maze of red tape and bureaucracy," Dr. Larson reiterated.

Prior to Dr. Larson's address, Dr. G. Swink Hicks, outgoing MSMA president, told the association, "In Mississippi we have been spared most of the medical socioeconomic heartache found in most other states. Mississippi physicians have had little opportunity to come to grips with union-sponsored health care plans, closed panel programs, and the like."

"We should take full advantage of this unique margin and prepare to maintain the practice climate which enables us to give our best to our patients," Dr. Hicks said.

During other Tuesday activity, two presentations, authorized for the first time this year, were made. Dr. W. E. Caldwell of Baldwyn, chairman of the Committee on American Medical Education Foundation, awarded a check for $8,654.47 to Dr. Alton Bryant, vice chancellor, University of Mississippi, Jackson Medical Campus. In the past, AMEF grants were mailed directly to the schools, but this year constituent state associations were asked to cooperate in presentation of the grants.

Dr. Hicks and Dr. Long, in their positions as MSMA president and president-elect, awarded Dr. Frank M. Davis a certificate for his outstanding work in membership. Dr. Davis was vice president for the northern district.

Saunders Publications Listed

W. B. Saunders Company features the following recent books in their full page advertisement appearing elsewhere in this issue:

WHITE—CLINICAL DISTURBANCES OF RENAL FUNCTION
Diagnosis and treatment measures for kidney disorders

RUBIN—THORACIC DISEASES
Covers both medical and surgical management

MAYO CLINIC—DIET MANUAL
Recent advances in food, vitamin and dietary practice



MSMA's 93rd Annual Session opened Tuesday, May 9, at the Buena Vista in Biloxi, with members, trustees, officers, council members, delegates, residents, interns, medical students, guests, and exhibitors on hand for the big event.

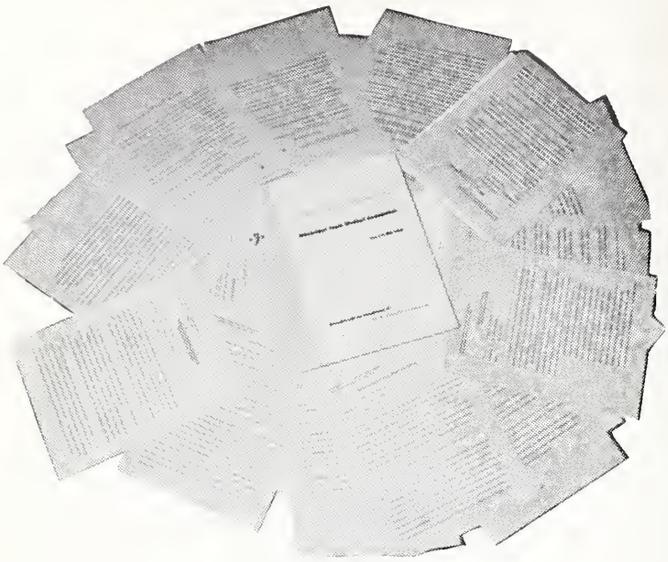
AT MSMA'S 93RD ANNUAL SESSION . . .





First step for everyone was registering. Left. Dr. Stanley A. Hill of Corinth, MSMA past president, checks in at the Buena Vista desk. Right. Mrs. Donna Beach, Mrs. Jo Ingram, and Mrs. Pat Horne, all of Jackson, welcome Drs. E. LeRoy Wilkins, Clarksdale, left, and J. P. Culpepper, Jr., Hattiesburg, right. Below. The House of Delegates convenes, officially opening the 1961 meeting. About 100 were in attendance at the first session.







AMA President-Elect Dr. Leonard W. Larson, Bismarck, N. D., addresses the House of Delegates.

. . . DELEGATES REVIEWED POLICY . . .







Left. Mr. Speaker and Mr. Vice Speaker discuss the day's agenda. Left is Dr. B. B. O'Mara of Biloxi and right is Dr. Lawrence W. Long of Jackson, who substituted for Dr. Howard A. Nelson of Greenwood. Center. The gavel changes hands. From left to right are Dr. G. Swink Hicks of Natchez, immediate past president; Dr. Lawrence W. Long of Jackson, president, and Dr. C. P. Crenshaw of Collins, president-elect. Right. Dr. Hicks introduces auxiliary officers. From left to right are Mrs. Lee R. Reid of Jackson, past president; Mrs. John G. Egger of Drew, president, and Mrs. A. T. Tatum of Hattiesburg, newly chosen president-elect.



Dr. H. H. McClanahan of Columbus, chairman of the Board of Trustees, administers president's oath to Dr. Long as Dr. Hicks and Rowland B. Kennedy, executive secretary, look on.





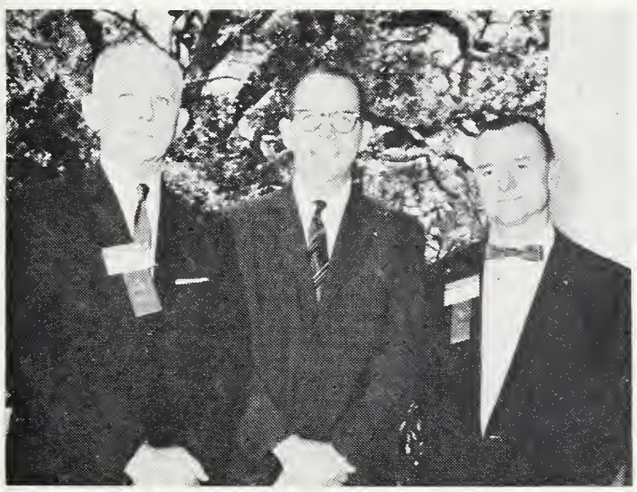


Left. Leaders in the Section on Obstetrics and Gynecology are (left to right) Dr. Carl Lewis, outgoing chairman; Dr. Blanche Lockard, secretary, and Dr. Michael Newton, chairman. All are from Jackson. Center. Speakers for the Ob-Gyn Section meeting are, from left to right, Dr. C. G. Sutherland of Jackson, Dr. Isadore Dyer of New Orleans, La.; Dr. Jack Pritchard of Dallas, Texas, and Dr. Newton of Jackson. Right. Newly named officers of MSMA's Section on Preventive Medicine are Dr. W. E. Riecken of Kosciusko, secretary (left), and Dr. P. T. Howell, of Forest (right), chairman. The seven scientific sections heard 26 speakers during the session.



Old and new officers of the Section on General Practice stop for the camera. From left to right are Dr. John B. Howell of Canton, incoming chairman; Dr. Tom H. Mitchell of Vicksburg, outgoing secretary; Dr. William E. Lotterhos, incoming secretary, and Dr. Robert J. Moorhead of Yazoo City, outgoing chairman.

. . . SEVEN SCIENTIFIC SECTIONS MET . . .



Speakers for the Section on Preventive Medicine discuss the session program. From left to right are Dr. A. L. Gray of Jackson, Dr. Blair E. Batson of Jackson, and Dr. Ralph B. Hogan of Atlanta, Ga.



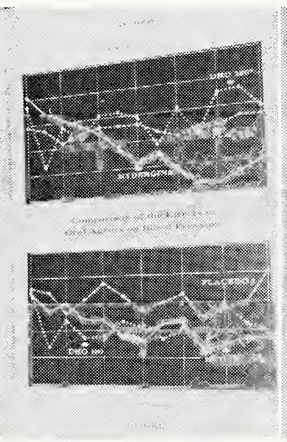




Dr. Long (right) points out an item of interest on MSMA's bulletin board to Dr. Hill (left) and Dr. Larson.

. . . THE BULLETIN BOARD STAYED BUSY

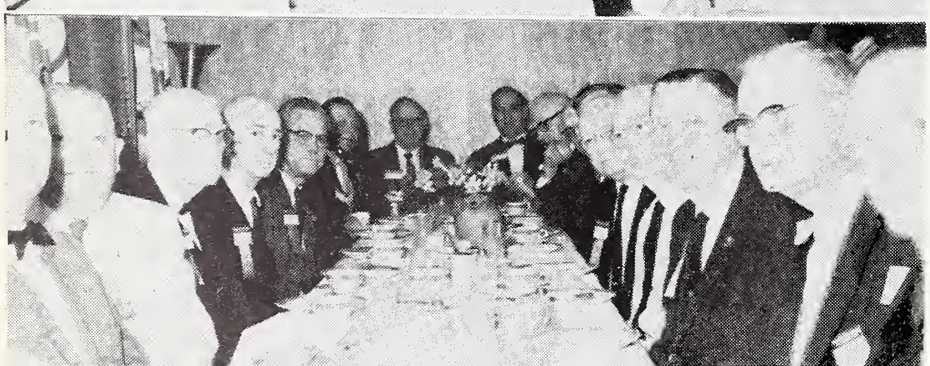






Left. Joe Miller, of Chicago, Ill. AMA field representative, and Dr. George E. Twente, of Jackson, a member of the AMA Council on Legislative Activities, talk over medical problems on the national level. Center. Dr. Wallace E. Caldwell of Baldwyn studies Dr. Raymond F. Grenfell's exhibit on "Treatment of Essential Hypertension," one of eight scientific exhibits at the annual session at Biloxi. Right. The busiest man at the annual session, Dr. C. D. Taylor of Pass Christian, general chairman, checks on one of the many daily functions.





Top. Members of the Fifty Year Club gathered for an early morning breakfast. Bottom. Past presidents of the association hold their annual breakfast meeting.

State Specialty Groups Name 1961 Officials

A number of state specialty societies held meetings concurrently with MSMA's 1961 annual session.

In its meeting on Monday, May 8, the Mississippi Association of Pathologists named Dr. Lawson C. Costley of Tupelo president. Other officers are Dr. Robert S. Cooke, Jr., of Hattiesburg, president-elect and Dr. W. P. Featherston of Jackson, secretary.



New officers of the Mississippi Association of Pathologists look over the group's program. Left is Dr. Lawson C. Costley of Tupelo, president, and right is Dr. W. P. Featherston of Jackson, secretary.

New officers of the Mississippi Urological Association, which also met on Monday, are Dr. Julian Wiener of Jackson, president; Dr. Sidney O. Graves, Jr., of Natchez, president-elect, and Dr. Gerald Wessler of Gulfport, secretary.

The Mississippi Society of Anesthesiologists held a Monday luncheon meeting at which Dr. E. M. Papper of New York was the featured speaker. New officers of the association are Dr. Leonard W. Fabian of Jackson, president; Dr. M. Ney Williams of Jackson, vice president; and Dr. Curtis W. Caine of Jackson, secretary-treasurer.

Dr. Willard H. Boggan of Jackson was inaugurated president of the Mississippi Society of Internal Medicine at the group's Monday meeting. Other officers are Dr. T. T. Justice of Gulfport, president-elect and Dr. Frederick Tatum of Hattiesburg, secretary. Members of the council are Dr. John Archer of Greenville, Dr. P. S. Herring of Vicksburg, Dr. George Barnes of Columbus, Dr. Osmond Dabbs of Gulfport, Dr. A. Gayden Ward of Jackson, and Dr. James H. Danner, Jr., of Laurel.

Other groups meeting on Monday were the Mississippi Chapter of the American Academy of Pediatrics and the University of Mississippi medical alumni.

The Mississippi Radiological Society held a luncheon meeting on Tuesday, May 9. Tuesday evening, the University of Tennessee and Tulane University medical alumni held dinner meetings.

Members of the Mississippi Ob-Gyn Society met Wednesday, May 10 for a social hour, luncheon, and scientific session. The Flying Physicians Association also held a Wednesday luncheon.

Surgeons Organize State Section of ICS

The Fellows of the State Surgical Division of the United States Section, International College of Surgeons, met Monday, May 8, to organize the Mississippi Section of ICS. The meeting was held in Biloxi just prior to MSMA's 93rd Annual Session.



Leaders in the International College of Surgeons stop for a talk after the organizational meeting of the state section May 8 in Biloxi. From left to right are Drs. Walker, Cook, Snelling, Culpepper, James, Long, and Lull.

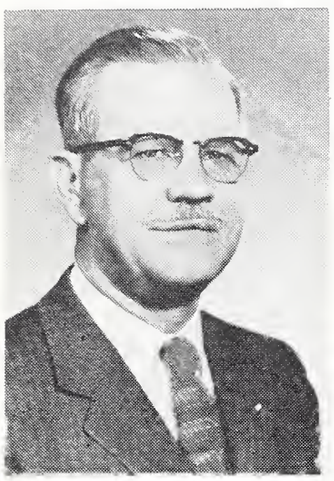
The group adopted a constitution and by-laws and named Dr. J. P. Culpepper of Hattiesburg president. Other officers are Dr. Murdock Snelling of Handsboro, president-elect; Dr. Grady Cook of Hattiesburg, vice president, and Dr. Willis Walker of Hattiesburg, secretary-treasurer.

Rear Admiral W. F. James of Chicago, Ill., executive secretary of ICS, was on hand for the organizational meeting. Dr. Lawrence W. Long of Jackson is regent for Mississippi. The International College of Surgeons has over 12,000 members in 72 countries. There are 44 members in Mississippi.

Dr. Long to Serve As MSMA President

Dr. Lawrence W. Long of Jackson will head the Mississippi State Medical Association as president during 1961-62.

A long time leader in medical organization, Dr. Long is also serving as chairman of the Publications Committee. He directed the Council on Medical Service as chairman from 1954-60 and headed its precursor, the State Emergency Medical Service Committee, from 1952-54. He was named speaker of the House of Delegates in 1958 with his term to extend until 1961, but resigned this post to assume the president-elect position.



Dr. Long

Dr. Long has also served as vice president of MSMA, a member of the Board of Trustees, chairman of the Section on Surgery for two sessions, and a member of the Advisory Committee to the Woman's Auxiliary.

In addition to his MSMA posts, Dr. Long has been president of the Mid-South Postgraduate Medical Assembly and president and secretary of the Central Medical Society. He is presently serving as regent for the International College of Surgeons. He was a member of the State Board of Health from 1940-46.

Dr. Long received his medical degree from Vanderbilt University in 1927 and interned at the Vanderbilt University Hospital. His residencies in surgery were taken at Charity Hospital in New Orleans, La., and at Charity Hospital in Jackson.

He is a member of the Southern Medical Association, a senior fellow in the American Medical Association, Southeastern Surgical Congress, and the American College of Surgeons, a diplomate and fellow of the International College of Surgeons, a fellow of the American Geriatrics Society, member and vice president of the American Association of Railway Surgeons, a diplomate of the American Board of Abdominal Surgery, and a member of the American Society of Abdominal Surgeons.

In 1946 Dr. Long was awarded the Distinguished Service Medal by the secretary of war for his service as state director of selective service for Mississippi.

He is married to the former Anne Wright of Jackson and they have two children, Lawrence W. Long, III, and Cornelia Bonney Long.

Mrs. Egger Heads State Woman's Auxiliary

By MRS. PRESLEY E. WERLEIN
Biloxi, Mississippi

Mrs. John G. Egger of Drew was installed on May 9 as president of the Mississippi State Medical Auxiliary at the group's 38th Annual Session in Biloxi.

Mrs. A. E. Margulis of Santa Fe, N. Mex., a director of the Woman's Auxiliary to the AMA, was the installing officer. After the presentation of the gavel and president's pin, Mrs. Egger addressed the auxiliary members.



Mrs. Egger

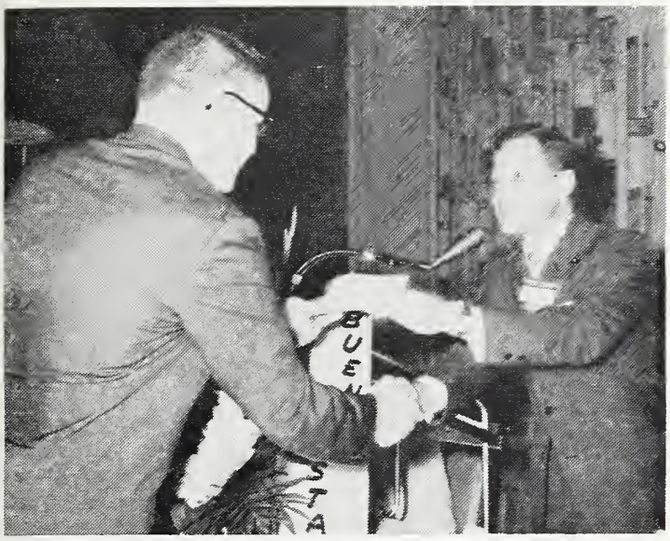
The new president is a native of Drew and is the daughter of A. L. Sage, the first mayor of the town of Drew. She is a graduate of Drew High School and of the Methodist Hospital School of Nursing.

She and Dr. Egger have four children: Mrs. Elizabeth Egger Fulgham, Steven and Edwin, twin sons, and Nancy Ann. Her brother, Dr. Fred P. Sage, is staff physician at Campbell Clinic, Memphis.

Mrs. Egger has served as president of the Chickasaw County Medical Auxiliary, president of Sunflower County Medical Auxiliary, and president of the Delta Medical Auxiliary. For three years she was safety chairman of the Mississippi State Medical Auxiliary.

She is past president of the Drew Culture Club and Drew PTA. At present Mrs. Egger is superintendent of adult work at Drew Methodist Church, a girl scout troop leader, and on the Girl Scout Advisory Board.

State Essayist Places First In National AAPS Contest



Dr. Curtis Caine of Jackson, chairman of the state AAPS essay contest, awards Robert G. White of Gulfport a check for $1,000, national first prize. White placed second in the state and first in the national contest which is annually sponsored by the Association of American Physicians and Surgeons. Tom Morris of Clarksdale won first place in the state and Susan H. West of Gulfport won third place.

Wofford Named Outstanding Alumnus by Premed Group

Dr. John D. Wofford, Jackson internist, has been named outstanding alumnus of the year by the Millsaps College chapter of Alpha Epsilon Delta, national premedical honor society.

Dr. Wofford, a 1950 graduate of Millsaps and an outstanding member of the honorary while in school, was honored at the annual banquet of the organization.

Now in its 26th year, the Millsaps chapter has made the outstanding alumnus presentation for six years. Last year the award went to Dr. Richard W. Naef, Jackson neurologist and psychiatrist. Recipients are chosen on the basis of contribution and loyalty to the college and the profession.

Dr. Wofford received his M.D. degree from Jefferson Medical College in Philadelphia and interned at Baptist Hospital in Memphis. He spent one year as a medical resident in internal medicine at John Gaston Hospital in Memphis and two years as a resident at the University of Mississippi Medical Center. At Jefferson he was chosen for membership in Alpha Omega Alpha, national honorary medical society. He currently serves as school physician at Millsaps.

Sections Elect Officers At Coast Session

MSMA's seven scientific sections heard 26 speakers, held luncheons, and elected officers during the 93rd Annual Session.

Heading the new Section on General Practice are Dr. John B. Howell of Canton, chairman, and Dr. William E. Lotterhos of Jackson, secretary.

Other section officers for the 94th Annual Session are:

Pediatrics—Dr. Frank M. Wiygul, Jackson, chairman; Dr. Carl P. Bernet, Jr., Greenwood, secretary.

Medicine—Dr. Raymond Grenfell, Jackson, chairman; Dr. Joe Covington, Meridian, secretary.

Obstetrics-Gynecology—Dr. Michael Newton, Jackson, chairman; Dr. Blanche Lockard, Jackson, secretary.

Preventive Medicine—Dr. P. T. Howell of Forest, chairman; Dr. W. E. Riecken, Kosciusko, secretary.

Surgery—Dr. James T. Thompson of Moss Point, chairman; Dr. Joseph G. McKinnon of Hattiesburg, secretary.

Eye, Ear, Nose and Throat—Dr. William T. Wilkins, Clarksdale, chairman; Dr. Emmett M. Herring, Jr., Hattiesburg, secretary.

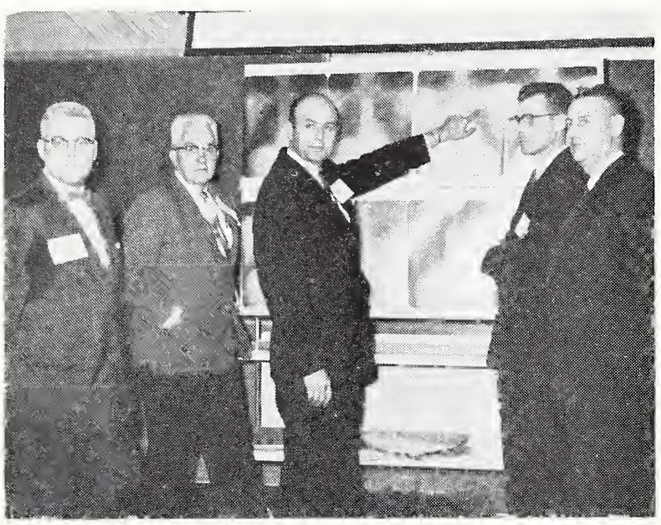
Dr. Staton Receives Fifty Year Club Pin



Dr. D. E. Staton and Mrs. Staton of Columbus, right, were recently honored with a party for Dr. Staton's 50th year of medical practice. Dr. and Mrs. S. B. Platt, left, honored the couple at their home with a large number of Columbus physicians attending. Dr. Frank Baird presented the Fifty Year Club pin and plaque to Dr. Staton.

Dr. Allison Elected Thoracic Society President

Dr. Fred Allison was named president of the newly-named Mississippi Thoracic Society, formerly the Mississippi Trudeau Society, during the organization's April 19 meeting. He succeeds Dr. H. S. Stauss of Jackson.



Dr. Martin M. Cummings, center, featured speaker at the April 19 Mississippi Thoracic Society meeting, discusses an x-ray photograph during a coffee break. Looking on are, from left to right, Dr. Karl Stauss, outgoing president; Dr. John Busey, newly elected vice president; Dr. Jack Herring, member of the Executive Council, and Dr. Jesse L. Wofford, scientific essayist for the meeting.

Other officers are Dr. John F. Busey of Jackson, vice-president, and Dr. Jack Herring of Sanatorium and Dr. Blair Batson of Jackson, members of the Executive Council. Dr. Watts Webb of Jackson was named to represent the state group on the American Thoracic Advisory Council.

The scientific program arranged for the meeting featured an address by Dr. Martin M. Cummings, chairman and professor of microbiology, University of Oklahoma Medical Center, Oklahoma City, Oklahoma. Dr. Cummings spoke on the "Significance of Skin Reaction to Atypical Tuberculins."

Other speakers were Dr. Jack Herring, assistant superintendent, Mississippi State Sanatorium, who discussed "A Series of Sarcoid Cases," and Dr. Jesse L. Wofford of Jackson who spoke on "Surgical Management of Tuberculosis in Children."

The Mississippi Thoracic Society serves as the medical section of the Mississippi Tuberculosis Association. In this cooperative relationship, the society acts as the medical advisory board on all medical problems confronted by the MTA.

TB Association Names Dr. Watkins President

Dr. Clyde Watkins, superintendent of the Mississippi State Sanatorium was elevated to the presidency of the Mississippi Tuberculosis Association at the organization's one day meeting April 20 in Jackson.

Dr. Watkins succeeds Mrs. H. R. Whitten of Charleston. Other officers named were Miss Ona Mae Willingham, Wiggins, president-elect; Mrs. U. G. Brunson, Hazlehurst, vice-president; Mrs. Whitten, secretary, and E. E. Laird, Jackson, treasurer.

Dr. V. B. Harrison of Oxford was one of six honored for 25 years' volunteer service in the fight against tuberculosis. Dr. Robert E. Schwartz, Hattiesburg, was one of five former presidents to receive awards.

Chief speaker for the meeting was Clarence W. Kehoe, director of the Christmas Seal drive, New York City.

The program's theme, "The Big Push," was outlined in presentation of education, public information, treatment, and funds campaign in two sessions.



Judson M. Allred, Jr., executive director of the Mississippi Tuberculosis Association looks over the organization's April 20 program with Dr. Clyde Watkins, superintendent of the Mississippi State Sanatorium, newly elected president of MTA.

Research Forum Planned For AMA Annual Meet

The first Multiple Discipline Research Forum of the American Medical Association will be one of the main features of the AMA's 110th annual meeting in New York City, June 25-30.

The forum—embracing 15 branches of medicine—will include reviews of past research, brief reports on new research, and discussions of future trends in research at general sessions Tuesday, Wednesday, and Thursday in the Coliseum.

The first two days of the forum will be taken up with reviews of the contributions of basic and clinical science to medicine and medical practice and panel discussions on future trends in research in anatomy, biochemistry, physiology, biophysics, pathology, microbiology, pharmacology, genetics, obstetrics-gynecology, pediatrics, neurology, psychiatry, internal medicine, surgery, and nutrition, including the possible relationship to unsolved clinical problems.

The presentation of original fundamental research by 60 young investigators in a variety of disciplines will begin at 4 p.m. Wednesday and continue through Thursday. Brief discussion periods are scheduled for these five-minute reports.

The annual meeting will open Monday with a general scientific meeting presented jointly by the AMA Section on Diseases of the Chest and the American College of Chest Physicians. The program will include two symposiums on heart disease.

Special conferences on nutrition and diabetes will be held in conjunction with the scientific exhibit in the Coliseum.



"First the good news . . . your insurance covers very extensive surgery."

The Diet Conferences, sponsored by the AMA Council on Foods and Nutrition, will be held Tuesday through Thursday. "Cardiovascular Disease—Recent Advances" will be the topic of another discussion.

At the conclusion of the conference Thursday afternoon, program speakers will be available for informal consultations with physicians.

A program on "Renal and Adrenal Hypertension" will be presented Wednesday by the combined sections of General Surgery, Internal Medicine, Pathology and Physiology, Urology and General Practice.

A joint session of the sections on Military Medicine and Preventive Medicine will hear an address on live polio vaccine by Hilary Koprowski, Philadelphia, Thursday.

The section on Miscellaneous Topics will present programs on automobile accidents, the problem of the aging skin, and allergy.

Highlights of section meetings include:

Internal Medicine: "Factors Determining the Attack Rate of Rheumatic Fever" by Gene H. Stollerman, Chicago; "Current Problems of the Pneumonias" by Hobart A. Reimann, Philadelphia; and "The Billings Lecture: Etiologic Aspects of Nutritional Megaloblastic Anemias" by William B. Castle, Boston.

Obstetrics and Gynecology: Panel discussion on "Prenatal Influences on the Newborn," and "An Improved Friedman Pregnancy Test: A New Method" by Jack C. Norris, Atlanta.

General Practice: Panel and symposium on "Angina of Effort" and symposium on "Blood Fractions in Clinical Medicine."

Anesthesiology: "The Hazards of Anesthesia in the Patient on Antihypertensive Therapy" by Dr. LeRoy Crandell, Winston-Salem, N. C.; and "Clinical and Biochemical Studies of 1,600 Spinal Anesthetics for Cesarean Section" by Frank Moya and Bradley Smith, New York City.

Military Medicine: "Epidemic Non-Icteric Hepatitis" by Lester M. Morrison, Robert E. Hoyt, Milton Rosenthal, Milton G. Levine, and Robert Holeman, Los Angeles.

Miscellaneous Topics: "Preliminary Report of Medical Examinations for the Licensing of Drivers in Pennsylvania" by Charles L. Wilbar, Jr., Harrisburg, Pa., state secretary of health; "Objective Measurement of the Effects of Drugs on Driving Behavior" by James G. Miller, director, Mental Health Research Institute, University of Michigan; and "Management of Aging Skin—A Forum" by Stanley D. Simon, Robert G. Carney, Ervin Epstein and John J. Conley.

Dr. Hardy Addresses Delta Society Meeting

The 75th semi-annual meeting of the Delta Medical Society was held April 12 in Greenwood.

Highpoint of the scientific session was the discussion of "Newer Concepts and Measures in Fluid Therapy" by Dr. James D. Hardy, guest essayist. Dr. Hardy is professor and chairman of the department of surgery, University of Mississippi School of Medicine.

Other papers presented were "Peripheral Arterial Injuries" by Dr. Thomas V. Stanley, Jr., of Greenwood; "Salicylate Intoxication" by Arthur W. Lindsey, Jr., of Cleveland; "Practical Bacteriology in Office Practice" by Dr. John E. Rawls of Inverness; "Histoplasmosis" by Dr. T. S. McCay of Belzoni, and "Management of Polyps of the Colon and Rectum" by Dr. Patrick R. Hunter of Greenville.

Discussion leaders were Dr. L. Stacy Davidson, Jr., of Cleveland; Dr. Boyce M. Skinner of Greenwood, Dr. George F. Archer of Greenville, and Dr. Hardy.

During the business session Dr. John G. Archer presented Fifty Year Club awards to Dr. H. E. Day of Duncan. In other action, Delta Society members passed a resolution expressing opposition to the King-Anderson Bill.

Dr. John S. Barr of Belzoni is president of Delta Medical Society, Dr. R. F. Spaulding of Arcola is president-elect, and Dr. Howard A. Nelson of Greenwood is serving as secretary-treasurer.

Directory of Specialists Adds 31 State Doctors

Thirty-one Mississippi physicians have recently qualified for listing in the biennial "Directory of Medical Specialists," issued in April.

The directory, published by Marquis Who's Who, Inc., has added these physicians, who have completed training earning them certificates as medical specialists, to their listings of 73,000 other Mississippi and national specialists.

Certification by one of the examining boards is necessary for the listing.

Doctors added to the directory are Stanley Burrows, Frank C. Gruich, and Dr. Joseph E. Wesp, all of Biloxi; Jack S. Sartin, Clarksdale; M. B. Moore, Jr., Columbia; Jack R. Robinson, Keesler Air Force Base; Leon Lenoir, Jr., and Robert S. Spain, Greenville; Edward C. Parker, Jr., Gulf Park; Richard H. Clark, Jr., and E. M. Herring, Jr., Hattiesburg.

William S. Alyea, III, John Reuben Bise, III, Oscar W. Conner, III, Frazier E. Fyke, Jr., T. G. Guy, Jr., Mitchell H. Harkins, W. Byron Inmon, Chester H. Lake, M. Z. Nell, Walter R. Neill, John J. White, Thomas K. Williams, and Frank M. Wiygul, Jr., all of Jackson.

Glenwood L. Cook, Laurel; Earl M. Eggers, Bruce M. Kuehnle, L. C. Lehmann, and Charles Stern, Natchez; Walter L. Bourland, Tupelo, and Herman E. Kellum, Jr., Vicksburg.

Some of these physicians are currently serving at air force bases in Mississippi and consequently are not listed in MSMA's directory.

Dr. Gray Urges Protection Of State Water Supply

Dr. A. L. Gray, State health officer, urged Mississippi's women leaders to start programs to "clean up, conserve, and protect Mississippi's water supply" at the April 27 Water Pollution Control Conference.

Five hundred women's club leaders from over the state attended the conference, which considered Mississippi's water supply problems in relation to the often unrecognized threat of water pollution.

Dr. Gray urged "immediate programs to clean up, conserve, and protect Mississippi's water supply," in order to encourage development of industry in the state.

Rocky Mountain Conference On Cancer Scheduled

The 15th Annual Rocky Mountain Cancer Conference will be held at Denver's Brown Palace West, July 12 and 13 and will feature panel discussions on "Detect Cancer in Time!—Procedures, Problems and Solutions," and "Neoplasms of the Female Genital Tract."

Presidents of both the American Cancer Society and the American Medical Association will participate in the two day program. Application has been made for American Academy of General Practice accreditation for the conference.

Speakers on the Scientific program will include Dr. Ulrich R. Bryner of Salt Lake City, Dr. Vincent P. Collins of Houston, Dr. William Dock of Brooklyn, Dr. Manuel E. Lichtenstein of Chi-

cago, Dr. John R. McDonald of Detroit, and Dr. John A. Wall of Houston.

Morning sessions on both days of the program will be devoted to the panel discussions followed by round table luncheons with speakers. Individual papers will be delivered in the afternoon sessions.

The Rocky Mountain Cancer Conference, held annually in Denver, is cosponsored by the Colorado Division of the American Cancer Society and the Colorado State Medical Society.

Further information may be obtained by writing Rocky Mountain Cancer Conference, 835 Republic Building, Denver 2, Colorado.

Nutrition Council Hears Reports on State Problems

The Mississippi Nutrition Council held its first meeting since organization on May 3 in the State Board of Health Building in Jackson. Members of the council heard reports from the chairmen of three committees appointed to study nutritional problems of primary importance.

Miss Mary Ann Elkin, representing the Mississippi Congress of Parents and Teachers, reported on the problem of between meal snacks. She challenged the group to collect resource materials for use of the members of the council and others, to develop a specific educational tool on the subject, and to explore the idea of a spot check survey for valid information on between meal snacks.

Dr. Ann Stasch, head of the nutrition research at the Mississippi Experiment Station, reported on optimum nutrition for teenagers and young adults. She stated that the main shortages are in Vitamin A, Vitamin C, and calcium.

Nutrition problems in low income families were discussed by Mrs. Alice Babington, home economics consultant of the Mississippi Department of Public Welfare, and chairman of the study committee on this subject. She first defined the problem and recommended that the council plan to work with other state agencies interested in the matter, to make use of all news media to reach individual families, and to give local level demonstrations.

The other officers of the council are Dr. B. A. Cohen, vice-chairman, and Miss Margaret McCarthy, secretary, both of Jackson. Together with the president, the officers will lead the council into a program of action based on the findings of the study committees.

MSMA's representative to the council is Dr. David J. Van Landingham of Jackson.

Applications for Research Support Invited by AHA

Applications from research investigators for support of studies to be conducted during the fiscal year beginning July 1, 1962, are now being accepted by the American Heart Association.

The deadline for submitting applications for Research Fellowships and Established Investigatorships is Sept. 15, 1961.

This also is the final date on which the association will accept applications for Research Fellowships. In the future, state and local Heart Associations will assume responsibility for supporting individuals in this category. Those applying in September may request either one or two year appointments.

Applications in the Grants-in-Aid category must be received by Nov. 1, 1961.

Further information and application forms for research awards may be obtained from the Assistant Medical Director for Research, American Heart Association, 44 East 23rd Street, New York 10, N. Y.

PERSONALS

J. K. AVENT, Grenada, was re-elected chairman of the Board of Trustees of Mental Institutions at the board's April meeting. Dr. Avent, owner and chief surgeon of the Grenada Hospital, has served continuously on the Board of Mental Institutions since its reorganization in 1947. He has been chairman since 1956.

GEORGE SPENCER BARNES has been named chairman of the Columbus Merit Program Steering Committee. The Merit Program is being sponsored by the local Chamber of Commerce in cooperation with the State Chamber of Commerce-Mississippi Economic Council. It is designed to measure needs of the community and to assist in remedying any deficiencies.

RALPH BROCK, McComb, was elected president of the Parents' League at an April meeting. He succeeds Dr. Tom Mayer.

JOHN DAVIS was elected president of the Natchez Flyers Club at its Fly-Away on April 16. Members of the club flew to Davis Island for a picnic lunch.

AUXILIARY

Auxiliary Elects Officers At Annual Session Meeting

The 38th Annual Session of the Woman's Auxiliary to the Mississippi State Medical Association opened May 8 at the Buena Vista Hotel in Biloxi, meeting concurrently with MSMA's session.

During the Tuesday activity, Mrs. John G. Egger of Drew assumed the auxiliary presidency.



Auxiliary officials and guests pause for JOURNAL MSMA's *camera. From left to right are Mrs. James T. Thompson of Moss Point, general chairman; Mrs. A. E. Margulis of Santa Fe., N. Mex., director of the American Medical Association Auxiliary; Mrs. Lee R. Reid, 1961 MSMA Auxiliary president, and Mrs. Roy Douglass of Huntingdon, Tenn., president of the Southern Medical Association Auxiliary.*

Mrs. Egger, who succeeds Mrs. Lee R. Reid of Jackson, was installed along with other auxilary officers by Mrs. A. E. Margulis, Santa Fe, N. Mex., a director to the AMA Woman's Auxiliary.

Mrs. Margulis conducted the installation at a Tuesday luncheon in her honor. Also honored was Mrs. Roy Douglass, Huntingdon, Tenn., president-elect of the Woman's Auxiliary to the Southern Medical Association.

Serving with Mrs. Egger next year will be Mrs. A. T. Tatum, Hattiesburg, president-elect; Mrs. Wendell Holmes, McComb, recording secretary; Mrs. T. J. Safley Jackson, treasurer; Mrs. Lee R. Reid, Jackson, first vice president; Mrs. William N. Crowson, Clarksdale, second vice president; Mrs. Guy T. Vise, Meridian, third vice president, and Mrs. H. H. McClanahan, Jr., Columbus, fourth vice president.

In the auxiliary's business session earlier Tuesday, Mrs. Douglass told of the benefits and responsibilities of membership in the SMA auxiliary. She stressed the importance of Doctor's Day, the annual tribute to doctors, and said one of SMA's objectives is the preserving of the history of medicine in the South.

In Mrs. Reid's report of her year's work as head of the state auxiliary, she noted the theme of the year was heritage of American medicine.

She reported that $637 had been collected so far for the American Medical Education Fund through the state auxiliary units. There are 23 units in the state, including one new unit formed at Columbia.

Mrs. Barron Heads New Columbia Auxiliary

Mrs. Seth Barron was named first president of the Columbia chapter of the Woman's Auxiliary to MSMA at the group's organizational meeting on April 27.

With the assistance of Mrs. Gerald Gable, president of the Hattiesburg chapter, and Mrs. J. P. Culpepper of Hattiesburg, counselor for the southern district, the group set up plans to meet locally once a month and twice a year with the Hattiesburg auxiliary.

Other officers include Mrs. J. S. Haney, vice president; Mrs. M. B. Moore, Jr., secretary; Mrs. D. A. Ratliff, treasurer, and Mrs. Hal Windham, reporter.

Gulfport Auxiliary Names Mrs. Gaddy President

Mrs. Hurd Gaddy, president-elect of the Gulfport Medical Auxiliary, was elevated to the office of president at the group's April meeting. She succeeds Mrs. M. M. Snelling.

Other officers named include Mrs. H. K. Rouse, president-elect; Mrs. Richard Burman, first vice president; Mrs. George Vickery, second vice president; Mrs. Emile Gutman, secretary, and Mrs. Chester West, treasurer.

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ORIGINAL PAPERS

Early Care of Acute Head Injuries

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Jackson, Mississippi

The authors describe a system for immediate treatment, evaluation, and disposition of patients with head injuries. They divide these patients into three groups—those that may go home immediately, those that must be observed in the hospital, and those that must be operated upon immediately—and discuss the criteria for each category. The use and value of the lumbar puncture and skull films in evaluating patients with head injuries is considered and comment is made on ways to increase the safety of their transportation.

When the physician is called to attend a person who has recently sustained a head injury, his first act must be to make a quick inspection of the patient to check upon the adequacy of the airway, the presence of shock, or external bleeding. If needed, immediate measures should be instituted to insure an adequate airway and adequate ventilation. This can be accomplished by using an oral airway, suctioning out the nasopharynx and trachea to remove mucus secretions and blood, and the placing of an intratracheal tube or a tracheostomy. If shock is present, the foot of the stretcher should be elevated, warm blankets applied, and blood given immediately. Of course, all hemorrhage from the scalp or other areas should be controlled by applying hemostats to the bleeding points.

HISTORY

After immediate first aid measures have been rendered, the patient's history can be obtained and the complete physical and neurological examination can be accomplished. The decision can then be made for handling the patient in one of three ways. He may be returned to his home and watched as an outpatient, carried to the operating room immediately, or admitted to the hospital for observation and care with the possibility that he may need an operation at a later time. In taking the history, it is important to obtain all the facts pertaining to the time, method, and exact circumstances of the accident. Also, particular attention should be paid to the exact state of the patient's conscious level as soon as he was observed by any other person. His conscious level is then traced up until the time of the present examination. A clear picture is developed as to whether he has had a progressive improvement or whether he has improved and then digressed again. Inquiry should be made about alcohol and drug consumption, heart

From the Department of Neurosurgery, University of Mississippi School of Medicine.

disease, old strokes, hypertension or hypotension, and other serious illness with possible neurological sequela. Residual neurological signs from these illnesses must be taken into account when evaluating the patient's physical findings.

EXAMINATION

A thorough neurological examination should be accomplished on all patients. Even in the comatose or semicomatose patient, a great deal of information can be obtained. In these latter patients, the cranial nerve function, the ability to move extremities with painful stimulus, the ability to perceive a painful stimulus over areas of the body, the tone of the extremities, the reflexes, and the pupillary responses can be noted. The optic discs and fundi usually are normal in a patient with an acute head injury. If papilledema exists, it means that the patient has had an increased intracranial pressure for 24 hours or longer. If papilledema coexists with a fresh head injury, the possibility should be considered that the accident may have been caused by some pre-existing neurological disease.

If the optic discs are flat, and spontaneous venous pulsations are noted in the eye grounds, intracranial pressure can be said to be normal at that time. This sign is particularly helpful when following children who have sustained a fall and been rendered unconscious. They frequently vomit several times during the first few hours after their injury and one is uneasy about their intracranial status. The persistence of spontaneous venous pulsations is quite reassuring during this phase. In evaluating the reactivity of the pupils, one must bear in mind that local trauma to the eyes will cause a dilated, fixed pupil. Unless local trauma to the eye is evident, a slowly reacting, a dilated, or a dilated and fixed pupil must be taken as a sign of a tentorial pressure cone due to an expanding intracranial lesion. In acute head injuries, this will almost always be due to a hematoma; however, on occasions, it may be due to cerebral edema alone.

The general examination should not be minimized. The entire body must be inspected and palpated if all lacerations, bruises, puncture wounds, and other injuries are to be found. Resistance to movement or stiffness of the neck may indicate a cervical fracture. X-rays of the neck should be taken and viewed before further manipulation. Palpation and auscultation of the chest will alert one to rib fractures, a pneumothorax or a hemathorax. Palpation of the abdomen will demonstrate "guarding" of the abdominal muscles which may indicate intra-abdominal hemorrhage. The limbs should be examined and manipulated to detect any fractures or dislocations.

THE USE OF X-RAYS

Skull films should be taken on all persons whose head injury has been severe enough to render them unconscious. This is true even though the unconsciousness is for a brief period of time. Only those persons who have been stunned momentarily may be observed without films. This study may show an unsuspected fracture following an apparently mild injury. It is necessary in treating the patient and also to protect the physician from a medical-legal viewpoint. The x-ray studies need not be done as an emergency if the patient's condition is improving rapidly, and he is being admitted to the hospital for observation. Most persons who are admitted to the hospital for observation can have the x-rays taken during the regular working hours of the department of radiology. Usually, much better films will be obtained.

USE OF LUMBAR PUNCTURE

The lumbar puncture is of limited assistance in evaluating a person who has had a head injury. Several facts should be kept in mind. A clear cerebral spinal fluid or a normal opening pressure does not rule out a significant intracranial hematoma. A bloody cerebral spinal fluid or an increased pressure does not insure the presence of a significant intracranial hematoma. The lumbar puncture is useful in ruling out a concomitant central nervous system infection or in evaluating an intoxicated person about to be jailed. In this latter instance, clear spinal fluid and a normal opening pressure is of some help in determining that the patient's lowered conscious level or impaired intellectual function is due to alcoholism.

In view of the foregoing facts, the patients can now be divided into the three categories: those who can be observed as an outpatient, those who must have surgery, and those who must be observed in the hospital.

OUTPATIENTS

These patients must meet several criteria. (1) They must have been merely stunned or unconscious for only a few seconds and certainly for less than a minute or two. (2) The neurological examination must show a return to an entirely normal state. In particular, the patient must be alert and be completely aware of his surroundings. (3) The skull films must have been taken and must be normal. (4) A responsible person must be available to care for the patient during the next 24 hours.

It is obvious that the patient might be incapable of returning himself for further care if he should develop difficulty during this period of observation at home. A responsible person should be told to return the patient for further observation if severe headache develops, vomiting ensues, the pulse decreases to 60 or less, the pupils are unequal, or the patient cannot be aroused to his usual alert and normal state. The patient should be checked every two hours during the next 24 hours after his injury.

SURGICAL PATIENTS

This group may be subdivided into five groups. The first group includes those patients with compound skull fractures (Fig. 1). Even though the fracture may be small, at the moment of injury the object or surface producing the compound skull fracture may have forced hair, dirt, or other debris into the fracture site. This must be thoroughly debrided. The underlying dura may have been torn and the brain injured. The brain should be inspected and all necrotic brain and blood removed. The dura should be closed primarily. Occasionally, a fascial graft may be necessary to close the gap. After a thorough cleansing and debridement of the wound, it should be closed with an interrupted layer of silk sutures in the scalp. No sutures should be buried in the subcutaneous tissue or galea.



Figure 1. Examples of compound skull fractures with dural and cortical laceration.

A few compound skull fractures may be debrided in the hospital emergency room. They are the simple, linear, undisplaced fractures under a minor scalp laceration. As noted above, debris may be forced into the fracture line at the moment of injury with the bone edges springing back to a normal position. The fracture line must be curretted at numerous points to rule out the presence of indriven debris. If the fracture line is clean, the wound may be cleaned and closed as a simple scalp laceration. If the fracture line is not clean, the patient should be transferred to the operating room. Then the bone is rongeured from the fracture line and a thorough debridement is performed.

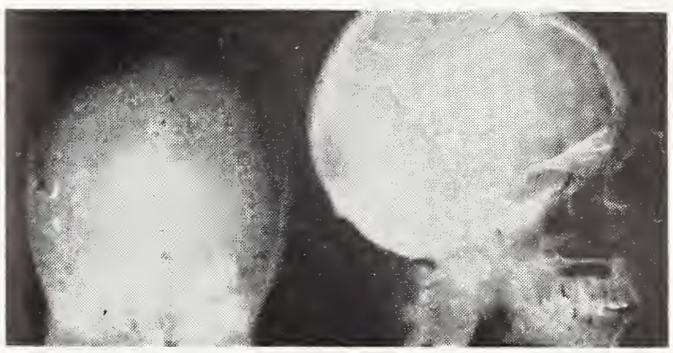


Figure 2. Example of skull fracture with penetrating injury of brain from missile.

The second group includes patients with penetrating skull fractures from bullets or other missiles (Fig. 2). These are debrided in the manner of a compound skull fracture. In addition, the track of the missile must be thoroughly suctioned out and cleaned of necrotic brain, blood, bone chips, and the missile, if possible.

The third group contains patients with indriven objects into the skull. An example is shown in Figure 3. Other examples are ice picks, nails, handles of machines, and dashboard control knobs. These objects must not be removed until every preparation has been made for an immediate craniotomy. The surgeon must be ready to rapidly perform a craniectomy to explore any bleeding points and bring them under control. Often these indriven objects are tamponading a major venous sinus or an artery of the cortex. If they are removed in the doctor's office or in the hospital emergency room, one may be faced with a most

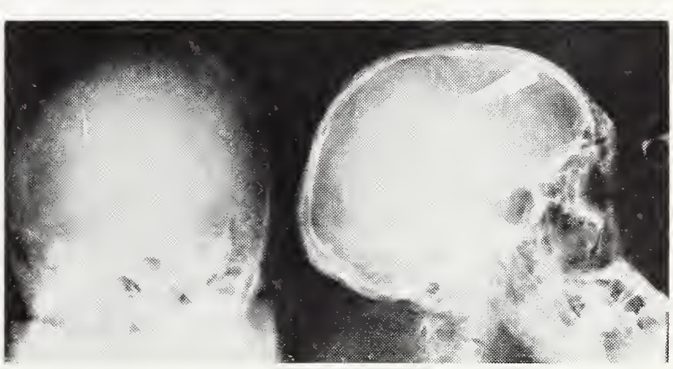


Figure 3. Example of indriven object into skull. The knife blade broke off at edge of scalp in right frontal area.

frustrating experience of having a torrent of blood come through a small gap in the skull. Usually it is impossible to work through the bony hole to stop the bleeding. Even if packing can be placed into the wound, it may cause excessive damage to the brain.



Figure 4. Example of depressed skull fracture. The bone is depressed more than one centimeter over the left motor strip.

The fourth group includes patients with depressed skull fractures of a significant degree (Fig. 4). Various neurosurgeons will disagree as to the exact point where a depressed skull fracture should be elevated, but most all neurosurgeons will agree that a depression of one-half centimeters or more over a "vital" area and a depression of a centimeter or more over a "silent" area should be elevated. The findings at operation almost always appear worse than would be suggested by the x-ray studies. If there is any doubt about elevating the fracture, it should be resolved in favor of operation. The "vital" areas are considered to be those portions of the cortex representing the motor and sensory strip, area 8 for eye movements, the visual cortex in the occipital area, and the speech areas of Broca and Wernicke in the dominant hemisphere. The "silent" areas are the parietal lobe in a nondominant hemisphere, the frontal hemispheres, and other areas that are not known to have a specific and particularly vital function. Since the simple depressed skull fracture does not have a break in the continuity of the scalp over the wound, the operative incision is a sterile one and usually the bone fragments can be elevated and left in place. If the bony fragments can be replaced, it has the advantage of not requiring a cranioplasty some time in the future.

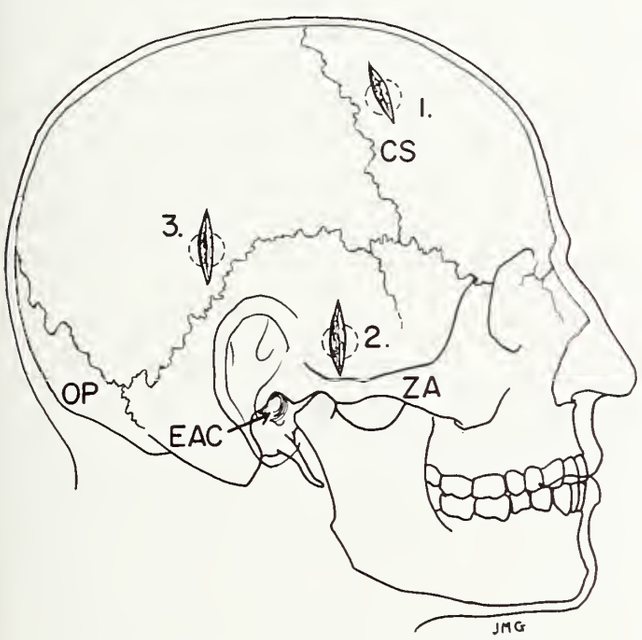
The fifth and final group contains patients with signs of development of increased intracranial pressure or "pressure cone." The general signs of increasing intracranial pressure subsequent to a hematoma are those of lowering of the conscious level, a slowing of the pulse, and a rise of the blood pressure. The respirations may be slowed or irregular in the extremely critical stages. The level of consciousness is the most accurate measure of the patient's general condition. It may be altered considerably before the patient's pulse begins to slow. Either the pulse, blood pressure, or conscious level may be altered before the other two are changed. When these general signs of increased intracranial pressure appear, the patient's airway should be rechecked to insure its adequacy. Often, these symptoms are due to a poor respiratory exchange with resulting cerebral hypoxia. Even a mild cerebral hypoxia causes a marked swelling of the traumatized brain. A correction of the airway should bring a rapid improvement in the patient's condition with his conscious level improving or his blood pressure or pulse beginning to return to a more normal level within 20 minutes.

An intracranial hematoma may be manifested by the tentorial pressure cone syndrome. This consists of a slowly reacting or unresponsive pupil when stimulated with light and a positive Babinski sign. It indicates that the brain stem has been shifted lateralward by swelling of the temporal lobe or by a medial displacement of the temporal lobe. This shift places pressure on the oculomotor nerve as it courses by the tentorium and on the cortical spinal tract at the level of the midbrain. This syndrome may be caused by an extradural or subdural hematoma pressing the temporal lobe medialward or by an intracerebral hematoma expanding the temporal lobe. The development of this syndrome is a sign of a neurosurgical emergency and immediate action must be taken if the patient's life is to be saved. Another group of symptoms that indicate an intracranial hematoma is the foramen magnum syndrome. This consists of cerebellar signs of incoordination and dysmetria

accompanying a decreased conscious level and bilaterally positive Babinski signs. It is caused by a hematoma in the posterior fossa. Particular observation for this syndrome should be made when there is an occipital fracture extending into the foramen magnum. This diagnosis is difficult to establish except when the patient has been fairly alert and later becomes less responsive.

Once it has been determined that the patient has increasing intracranial pressure secondary to a hematoma, the entire head should be shaved and prepared as a sterile field. Three burr holes should be placed on either side of the head, as indicated in Figure 5.

It should be noted that the focal neurological deficits and the impairment of a person's level of consciousness immediately after the moment of injury is invariably due to the concussion, contusion, or lacerations sustained by the brain. Regardless of the extent or severity of the patient's injury, it takes several minutes for a hematoma to accumulate. This is true even if arterial vessels are torn. If the person is rendered unconscious and has steady, although slow, improvement in his conscious level, he probably does not have a hematoma that is of surgical significance. Lowering of the conscious level or the development of a focal neurological abnormality are of much greater significance when they occur sometime after rather than at the moment of the injury. In this instance, the signs are indicative of a localized pressure effect and are usually due to a significant intracranial hematoma.



CS Coronal suture
ZA Zygomatic arch
OP Occipital protuberance
EAC External auditory canal

Figure 5. Suggested areas for placement of trephines for removal of epidural or subdural hematoma. The frontal trephine is one to one and one-half inches lateral to the midline and just anterior to the coronal suture. The temporal trephine is one inch in front of the ear and one and one-half inches above the zygomatic process. The posterior trephine is one inch above and one inch behind the tip of the ear.

INPATIENTS

This group includes all persons with head injuries that do not fall into any of the categories enumerated above. Among these are the comatose and semicomatose patients who do not have the tentorial or foramen magnum pressure cones and whose blood pressure, pulse, and respiration are normal. Many of this group are those who are improving steadily but have not had complete clearing of their sensorium or neurological deficits and who must be observed a few more hours in the hospital prior to discharge. Also included with this group are those with basilar skull fractures.

The basilar skull fracture is infrequently demonstrated by x-ray studies. A definite diagnosis of this condition should be made when there is bleeding from the nose, ear, or nasopharynx without evidence of direct trauma to the area. The orifice should be carefully inspected for evidence of local trauma. It should not be probed in an effort to demonstrate the bleeding site. Drainage of cerebral spinal fluid is indicative of a tear in the dura over the fracture but is not necessary to make the diagnosis. All basilar skull fractures should have prophylactic antibiotic therapy for one week.

All patients hospitalized for observation should be seen by the physician every few hours and their entire neurological status should be reviewed. The nursing orders should include the following points:

(1) Check and record vital signs of blood pressure, pulse, respiration, and conscious level every 30 minutes.

(2) Notify physician if:

a. The blood pressure exceeds (give figure 30 to 40 points above patient's normal level).

b. The pulse exceeds 130 or falls below 56 per minute.

c. The pupils are unequal or sluggish or unresponsive to light.

d. The level of consciousness decreases from the highest point attained at any time since injury.

(3) Suction nasopharynx and upper trachea every 20 minutes or more often if necessary (if

semicomatose or comatose). Note adequacy of patient's airway each time he is suctioned or at any other time an attendant is in the room.

(4) Turn patient from side to side every two hours.

(5) Record the temperature every two hours. Give 20 gr. of aspirin rectally as needed for temperature above 101 and alcohol-ice sponge as needed for temperature of 103 or more.

(6) Record fluid intake and output.

(7) Limit intake of fluid to 1,500 cc. on day of injury (in adult) and 1,500 to 2,000 daily for the next two succeeding days. One half of this should be normal saline and the other one half 5 per cent dextrose in water.

(8) If patient is deeply stuporous or comatose, insert a urinary catheter and connect to dependent drainage.

(9) Elevate head of bed to 65 degrees.

(10) If basilar skull fracture, give 250 mg. of erythromycin and 500 of Aureomycin intramuscularly every six hours. This may be changed to an oral route when the patient is conscious. With this diagnosis, the head should be elevated to 75 degrees both day and night until 48 hours and the antibiotics should be given for seven days after drainage of blood or cerebral spinal fluid has ceased from the nose, ear, or nasopharynx.

TRANSPORTATION

When the patient is to be transferred from one center to another, great care should be given to insuring the adequacy of his airway while en route. It is not uncommon for a semicomatose patient to sustain more injury from hypoxia during his transportation from one hospital to another than from his original trauma. He may survive the head injury and yet the outcome be poor due to his cortical damage by hypoxia. If there is any doubt that the patient's airway will remain adequate during the entire trip, he should be accompanied by a physician or an intratracheal tube should be placed or a tracheotomy performed prior to beginning the journey.

If signs of severely increased intracranial pressure or a pressure cone are present, a temporary remission of them may be obtained by injection of 100 cc. of 50 per cent glucose in water. This causes an immediate marked diuresis and a reduction of brain volume for three to four hours, then a "rebound" phenomenon occurs which produces an intracranial pressure even higher than the original one. Sometimes this is a lifesaving maneuver. When it is used, no time should be lost in getting the patient to the proper place and prepared for removal of his intracranial hematoma.

SUMMARY

1. A system for immediate treatment, evaluation, and disposition is given for patients with head injuries.

2. Criteria are given for dividing them into three groups that may go home immediately, must be observed in the hospital, or must be operated upon immediately.

3. The use of and the value of the lumbar puncture and skull films in evaluating these patients is discussed.

4. Items to be observed during hospitalization are noted.

5. Comment is made on ways to increase the safety of their transportation. ★★★

2500 North State Street

TOP-LEVEL TOYS

Yo-Yos and dart boards are catching on in executive suites and conference rooms. The Executive Yo-Yo, outsized, solid walnut and monogrammed in sterling silver, is being promoted by Donald L. Duncan, Inc., at $7.95. Users say it helps to relieve tension. Same argument is used to support British-pub type dart boards going up in offices. Users say a standard 301-point game takes six to eight minutes to play, which is shorter than the usual coffee break, and that it helps to promote efficiency.

Suicidal Impulses in the Operation Of Motor Vehicles

FREDERICK L. McGUIRE, Ph.D.

Jackson, Mississippi

Although the motor vehicle is not popularly identified as an instrument of hostility or death, a number of the 16,000 persons who commit suicide each year choose it as their instrument of self-destruction. The author discusses the psychological elements of suicide by motor vehicle and presents five case histories.

At least 16,000 persons are listed as suicides in the United States each year. Of these, a certain number utilize the motor vehicle as their instrument of self-destruction or as the means of expressing impulses and feelings which are commonly part of the suicidal pattern. Just as we do not know for sure how many suicides are actually committed each year, we have no way of knowing how many of the highway casualties are caused by suicidal impulses. However, we do know that some highway collisions are caused by drivers bent upon self-destruction, or as is so commonly noted among suicidal individuals, bent upon expressing their desire to hurt others.

THREE ELEMENTS

In support of the belief that suicide is the result of self-directed aggression, Menninger,[1, 2] has postulated that every suicidal act contains one or all of three elements: the wish to kill, the wish to be killed, and the wish to die. While some suicidal acts are not easily fitted into this schema, it would appear that in the case of highway collisions the theory of self-directed aggression is the most plausible frame of reference.

The purpose of this paper is to illustrate the fact that suicidal behavior is truly a definite and important part of our highway problem and to describe some of the specific behaviors which typify these acts.

Suicide by motor vehicle is similar to suicide by any other method, but it also has unique features. First of all, death by motor car is associated with violence and speed, especially in contrast to such techniques as poisoning and gas inhalation. Also, motor vehicle death is very likely to contain definite interpersonal factors which distinguish it from other methods; the person is seldom alone while driving on the highway for he is accompanied by other passengers or is in close proximity to other drivers. In fact, unless the suicidal driver takes particular care to the contrary, he is more likely than not to involve other people in his act.

An interesting point about many highway accidents is that while they may contain a strong element or a wish for self-harm, they seem to be dominated by the intense urge to harm others. The driver is venting his hostility outwardly and violently, and the wish to be hurt at the same time is seen as a kind of compensatory mechanism.

'PRE-SUICIDES'

If we accept the idea that suicidal impulses are generated as a result of a person first having an urge to kill, then an urge to be killed, and then finally arriving at the wish to die, we might label these particular drivers as "pre-suicides," or individuals who are still turning their hostility outward and who have not yet resigned themselves to the comparatively passive state of completely giving up any desire to live. Actually, when compared to the final stage of giving up any desire to live, this is a healthier state of mind. When a person directs his feelings outwardly, he is at least turning his

From the Department of Psychiatry, University of Mississippi School of Medicine.

energies more toward the source of his troubles. If he is able to use this energy rationally and constructively by either removing the source of conflict or rendering it ineffective by trying to deal with it and understand it, then he may be described as being mature and effective. It is when his outwardly-directed behavior is not rational and constructive that he becomes a problem to himself and to others and usually only succeeds in compounding his problem.

ACCESSIBILITY OF CAR

It is probable that many or even most of those drivers who use their motor vehicle to vent their hostility against others and/or themselves seldom come to the attention of either medical or community authorities. In a legal sense, and from the layman's point of view, they are very much "normal" people, a fact which in itself presents a problem in our efforts to identify these drivers before they hurt someone.

Another disturbing facet of this problem of suicidal impulses on the highway is that the motor vehicle is so readily accessible. When a person contemplates suicide by means of firearms or poison, for example, he must usually contrive to possess the necessary equipment. Often a suicidal impulse of this sort is thwarted by the fact that he cannot obtain a gun or a bottle of poison at the propitious moment. The motor vehicle is not only right at hand, but when a person is speeding along the highway, he often is separated from violence and possible death by only a few inches or by a slight twist of the steering wheel. Should a destructive impulse strike him at such a moment, he is likely to react with disastrous results. Many death-dealing collisions have taken place as the result of such behavior. Afterwards the driver, if he survives, is able to offer only a weak excuse, having no conscious recall for the real reason for his act.

AN INSTRUMENT OF DEATH

In spite of educational efforts to convince the public, the motor vehicle is not popularly identified as an instrument of hostility or death. This allows a driver to unconsciously respond to his deeper motives with less chance of awareness. If a person finds himself carelessly playing with a loaded gun, he is more likely to sense a disturbing emotion either in terms of being reminded of death and injury by the very nature of the weapon or by being reprimanded or restrained by other people. But if he suddenly finds himself speeding on the highway, taking a corner too fast, following the car ahead too closely, or crowding the white line, he is not prone to as quickly associate this lapse of judgment with violence and may even receive tacit or open approval from others. Thus, the automobile encourages the release of destructive urges in people who otherwise might maintain control of such impulses in much the same way that the presence of erotic literature on the newsstands sometimes stimulates the release of primitive sexual urges on the part of impressionable readers.

The fact that open hostility is behind many accidents is easily illustrated by case history. In California recently a driver was refused a drink at a bar. Enraged, he left, got into his car, and tried to drive through the door of the establishment. Failing, he backed up and made a second attempt, which also failed, but he did manage to ruin both the car and the front of the building, several pieces of furniture, and assorted bottles and glassware.

Newspapers have reported a case in which a man and wife engaged in strenuous verbal battle in their home. The husband fled the scene in his car, but the wife pursued him in her vehicle and rammed him at a nearby intersection, immobilizing his car. She then backed off and repeatedly rammed his vehicle again and again, until he fled on foot, at which time she tried unsuccessfully to run him down.

CASE INCIDENTS

In Maryland a driver was sent to jail for deliberately causing an accident. It seems that he was forced to use his brakes suddenly when another car in front of him stopped at a stop sign. In anger, the driver spurted ahead of the other car and threw on his brakes causing a rear end collision.

In California a 30-year-old man, who had broken up with his girl friend, tried to sideswipe another car and then yelled at the driver: "What's the matter, are you afraid to die?" He then drove onto a boulevard, veered into the left lane, scattered approaching motorists, and finally collided head-on with another car, killing the driver. He survived, and while in the hospital with his broken jaw wired shut, he scribbled on a scratch pad the words, "Let me die!"

However, not all caused accidents exist in a context of open hostility. In many instances the driver simply becomes depressed and no longer wishes to live. One such case was a man who found himself very much in debt and having difficulty in caring adequately for his wife and children. One day

he drove several miles to a rural railroad station and placed his family on a train for a visit to his in-laws. While driving home he began to reflect upon the apparent hopelessness of his situation and responded by pressing harder upon the accelerator. For several minutes he sped along the country roads at breakneck speed, until suddenly he looked at the speedometer. Realizing what he was doing, he slowed down and finally stopped the car by the roadside until he could trust himself to drive again. He related later that he only "wanted to lay down and die," and that he did not know how the car remained on the road. He also remarked that the thought occurred to him during the episode that it was fortunate that no one else was on the highway so that he could not hurt them.

CONFLICTS AT THE WHEEL

Cases such as these are by no means rare. Nearly every clinician has encountered patients who manifested their conflicts while behind the wheel. In fact, some clinicians who have been publicly linked with an interest in the problem of highway safety have suddenly found many of their patients telling for the first time of instances when they have either used or thought of using the motor vehicle as an instrument of impulse.

Police files are also full of situations in which people have dramatically and suddenly driven into rivers, off of cliffs, deliberately smashed into other cars and rammed into all kinds of things such as livestock, railroad trains, buildings, pedestrians, or have just taken their hands off of the wheel and closed their eyes. Theoretically, it is possible to consider all aggressive acts on the highways as being unconsciously or consciously suicidal in nature due to the fact that each time a driver acts out against others on the road he is also very clearly placing his own life in jeopardy. It is difficult to see how any collision that is consciously or unconsciously caused, or made more likely to happen, could be devoid of any thought of self-harm. This leads to the logical hypothesis that all "nonchance" highway accidents contain not only elements of the wish to kill, but the wish to be killed. This is not to infer that *all* accidents, in the home and on the job as well as on the highway, are motivated by the wish to harm and to be harmed, for it appears that, among other reasons, many people are so pressured by inner conflicts of other dynamic origins that they simply fail to properly perceive and react to dangerous situations they might have formerly handled with ease. But it does appear that most accident-producing behavior upon the highway can usually be placed somewhere on the wish-to-kill wish-to-die continuum.

EXPERIMENTAL STUDIES

If then, most collisions are the result of hostile feelings which are basic to the driver's personality and which are being vented other than toward the primary frustrating object (for example, the parents), it follows that any representative sample of accident-producing drivers would show other traits of aggressiveness and antisocial behavior. Such is the case. In those experimental studies which pertain to the relationship of personality and highway accidents both asocial and antisocial attitudes were found to be more prevalent in the accident groups.[1, 2, 3, 4]

The fact that younger drivers have a higher accident rate is also consistent with this type of reasoning. Emotional growth is said to be a process of gradually emerging from an infantile pattern of seeking the gratification of personal needs with no regard for others, to the point where we are able to control our selfish desires and adjust to outside demands. An optimum balance between the two sources of demand is said to represent "emotional maturity." As the youngster grows, his screams for food whenever he is hungry are replaced by a willingness to accept scheduled mealtimes, and his pleadings for a parent to buy him a toy or other object of pleasure are replaced by a desire to get a job and to become financially independent. However, this growth toward sublimation of need-satisfaction is punctuated by many ambivalent feelings. The youth is as uneasy about giving up the security of parental protection as he is anxious to become free and independent, causing him to act out his feelings in indirect and inconsistent fashion, a fact often paralleled by his style of driving.

AN INABILITY TO ADJUST

It is therefore possible to state that accident producing behavior, as well as more obvious forms of aggression and self-harm, is the result of an individual's inability to adjust successfully to the stresses of interpersonal relationships and to be able to perform within the rather narrow limits of conduct prescribed by the group. The more often he finds himself unable to stay within these limits, the more he is susceptible to the use of the motor vehicle as a means of expressing the anger of his frustration.

Research in highway safety was originally preoccupied with physical factors such as roadway design, environmental conditions, vehicle charac-

teristics, and psychophysics of vision, hearing, and reaction times. In recent years experimental evidence has begun to support the long-held conviction that the social attitudes are the primary differentiating characteristics of accident producing drivers. Attitudes are indeed important factors, but these are only the more visible facade of a person's basic personality. They are actually controlled and energized by the deeper layers of the human personality and are therefore not the ultimate source of the knowledge needed to understand man himself—his unconscious as well as his conscious feelings and drives.

It is evident that any well-rounded research program in this field must include a clinical approach to the individual driver, and failing this, must at least be prepared to integrate its own findings with whatever appropriate clinical evidence is available. Motor vehicles do not drive themselves and accidents are not produced by concrete roads or cloudy skies. They are produced by people—people made up of fears, hopes, impulses, and inhibitions. Only through an understanding of how these forces affect a person's driving performance can we ever hope to control our mounting epidemic of death and injury on the highway. Research as a product of good experimental design has not yet begun to reflect such an understanding, but it is quite possible that a systematic study of suicidal impulses will contribute significantly to such a project. ★★★

2500 North State Street

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UNWANTED: DEAD OR ALIVE

There once was a very cautious gal,
Who never romped or played.
She never smoked, she never drank,
From the path she never strayed.
So when she passed away, they say,
Insurance was denied;
For since she never, never lived,
They claimed she never died!

—*Friday Noon*
Ackerman Rotary Club Bulletin

The Advantages of Private Medical Care

ROBERT GOODWYN WHITE
Gulfport, Mississippi

The author, a Gulfport High School senior, won second place in state competition and first place in the national 1961 AAPS contest with this essay. The son of Mrs. Jean Videll White, Sr., and the late Mr. White, Robert or "Bob" is the youngest of four children. He has attended Gulfport schools from the first grade. He had as his senior English teacher Mrs. Houston Evans, who also taught the two other national Essay Contest winners from Gulfport—Dr. Dana George King, Jr., who is practicing medicine at Brandenburg Air Force Base, and William Carr, who is attending Tulane University School of Medicine in New Orleans, La. Bob plans to enter Mississippi State University in the fall and is seriously considering medicine as his profession.

UNDER THE PRESENT American system of private medical care, we are exercising the rights secured for us by our forefathers—rights that were purchased in blood. Could it be that so many generations have lived under freedom that we no longer truly appreciate or comprehend its worth? In the course of almost 200 years, some have come to look on the profound struggles of our gallant ancestors, who pledged their lives, their fortunes, and their sacred honor to the cause of freedom, as mere print on the pages of history books. Yet, the totalitarians have taught us that in order to retain this most precious possession of liberty we must individually value and preserve it. Shall we now begin voluntarily to relinquish our freedom? Shall we deny the medical profession the right of free enterprise? Shall we deny the individual his right to select or reject his own physician? The assurance of these freedoms under the present method is, without a doubt, the most important single advantage of private medical care.

In order more effectively to point out the advantages of the private practice of medicine, a comparison will be made with governmentally administered health control. These two methods of meeting the medical needs of our people have been currently debated and discussed with the result, perhaps, that more attention is given government control than it deserves. Through comparison the overwhelming advantages of private medical care come to light and at the same time the shortcomings of the opposite system are exposed.

A breakdown of medical expenditures under the two different arrangements shows that money spent by the public under our free enterprise system is used in the more effective manner. Persons receiving medical care pay directly to the person rendering the service. The persons unable to pay for this care receive it through private contributions, local taxes, and services donated personally by physicians. As for government controlled medicine, let us first dispel the notion that this is "free" care. You may be sure that payment would be extracted from the people in the form of taxes. This means that approximately the same amount of money would be paid out for medical expenses, with the recipient being the government rather than the doctors, the hospitals, the druggists, and the insurance companies. The government then assumes the role of the middle man, and its "cut" would be considerable, since a tremendous administrative staff would be necessary for the management of such a large scale government enterprise. Another wasteful expenditure would involve the hordes of hypochondriacs and malingers attracted by "free" care.[1] Add the cost of usual government inefficiency, and the total amount would place a heavy drain on the funds supposedly allocated for strictly "medical" attention.

Another element to be considered is the relationship existing between doctor and patient. This

First prize winner in 1961 national high school essay contest sponsored by the Association of American Physicians and Surgeons. Second place winner in state competition.

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association has been brought to fullest flower by the freely practicing physicians in America. The patient has confidence in the doctor, for he knows from past experience that his physician is genuinely interested in him personally and will see to his comfort while effecting a speedy recovery. The doctor for his part realizes that many patients enter his office in a fearful state. He is therefore ever ready to calm the anxious, explain the unknown, and otherwise set the patient at ease by his sympathetic understanding. On the other hand under the administration of medical care by the government, a rapport would be very difficult to achieve when, due to the vast number of patients assigned to the doctor, relations would have a "Make it snappy!" atmosphere. In the Soviet Union the young doctors are being taught that the "impersonal" doctor must be abolished.[2] This reflects the existence of a poor relationship between the doctor and patient in their government controlled medicine. The value of the cordial relationship found in our private practices is most evident, for the composure and complete confidence of the patient is essential to his recovery and to complete exchange of information.

ACTIVE SELF-IMPROVEMENT

Keeping abreast with the latest medical advances is necessary for the continued progress of the doctor. The incentive to do so is greatly stimulated by our competitive system of free enterprise. Our doctors participate in many kinds of postgraduate medical education—formal courses, consultations with colleagues, seminars, conventions, and conferences. The American Medical Association disseminates the latest medical techniques and advances through its periodical journal to all its members. To encourage contributions to medical progress, the AMA presents a Distinguished Service Award annually. Also, for the use of its members, it maintains a complete periodical library, where important medical journals from all parts of the world are available.[3] It is very doubtful whether such active self-improvement would be attempted under a system where the doctor is controlled by higher government officials. There would be no competitive necessity to keep up, and any desire to do so would likely be subjugated to more pressing matters such as the tremendous work load imposed by throwing the doors open to the entire public. Then too, it would do the doctor little good to familiarize himself with the new techniques and instruments when he is not free to decide whether or not they should be used. This lessening of the physician's responsibility and the near destruction of personal incentive are inherent dangers of so-called socialized medicine. How far superior our present method has proved to be!

MEDICINE'S ATTRACTION

The system under which medical needs are met will basically affect the caliber of the young people entering the medical profession. In our country where private medicine is practiced, the number of medical doctors graduating is increasing each year.[4] What is it that attracts these future doctors? Largely responsible is the position of high esteem in which our physicians are held due to the dedicated service of the profession as a whole. Equally attractive to the prospective student is the knowledge that after his long, hard, and expensive training he may practice under a free enterprise system which will afford him remuneration in direct proportion to his dedication and service. These attractions are of the type that appeal to the highest caliber of person both intellectually and morally. In contrast, under an arrangement with medicine governmentally controlled, security would probably be the main inducement. A competent person, however, is not afraid of competition and knows he can earn his own security. The better students then, finding little attractive about government medicine, would go into other professions. Soon the government would be faced with a severe shortage of physicians, and a general lowering of standards would result. The period of training now felt to be necessary might be cut. In Soviet Russia a great many doctors have been turned out under a speeded up curriculum, with the consensus among medical experts being that these doctors have been far inferior to our own.[5] Entrance requirements would also have to be lowered. The caliber of the persons entering medical schools would then be far below that of the present. How could these future doctors expect to match the service we shall certainly receive from those our medical schools are now training?

CONCLUSION

In each instance where a comparison has been made between private medical care and governmentally controlled medicine, we have seen that the scale tilts heavily in favor of our present system. In conclusion let us note well the phenomenal achievements of the American medical profession which have taken place under our private care arrangement and traditional way of life. At no other time in the history of civilization has man been so safe from the threat of disease.[6] American research has consistently provided humanity with

discoveries which have been of incalculable worth. The first true anesthetic was made in America, and painless surgery became a reality. Americans discovered and developed thyroxin, adrenalin, and the "mycins"—wonder drugs. The Salk vaccine for poliomyelitis has fortified the body against the dread killer virus. Surgery of the heart, chest, and lungs is a 20th century miracle, made possible by the antibiotics and improved techniques in blood transfusion and anesthesia. Medical technology put extraordinary instruments and machines, such as the automatic body scanner, into operation at an unprecedented rate during 1960.[7] Even in developing, perfecting, and mass producing drugs discovered in other countries, American technologists have excelled because of our free enterprise system. At the same time the education provided for medical students in America is readily recognized as the best in the world.[4] Advances on all fronts have been made by our freely practicing physicians, from the world famous to the locally known and loved family doctors. As evinced by the high health standard we enjoy, our medical profession, engaged in the private practice of medicine, has furnished America with the finest medical care to be found in the world today. ★★★

2411 16th Avenue

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TATTLETALE TATTOOS

In science's name, the Navy has been investigating tattoos in hopes of learning whether they have any more significance than appears on the surface. Navy men at New London submarine base were selected for the test, and the first fact turned up was that 30 per cent of the subjects wore tattoos. In intelligence, the tattooed and nontattooed turned out just about the same. And those with one tattoo had no significantly different psychological problems than those with none, which the Navy took as an indication that the one-timers had taken a fling and now were sorry. But a two-or-more tattoo man is likely to be a different cup of tea. He probably has unusual adjustment problems, strong underlying anxiety and personal conflict, the Navy researchers found. The sexual and aggressive symbols that frequently turn up suggested to the scientists reflections of unresolved sexual and aggressive conflicts. The researchers also recommended that a lot more tattoos should be looked at because they'll be psychologically and diagnostically revealing.

Clinicopathological Conference XVIII

Conducted by the Department of Pathology
Mississippi Baptist Hospital
Jackson, Mississippi

CPC XVIII concerns a 69-year-old man who was admitted to the Mississippi Baptist Hospital with presenting symptoms of right flank pain, fever, and hematuria. The physical examination showed a systolic murmur at the apex and a normal rate and rhythm of the heart. The abdomen was distended and there was tenderness in the right costovertebral angle. Discussers are Dr. Joel Alvis and Dr. Kenneth Heard.

THIS 69-YEAR-OLD WHITE MALE was admitted to the Mississippi Baptist Hospital on Feb. 3, 1961. Approximately eight days previously he had been hospitalized elsewhere because of abdominal pain. Three days prior to admission at the Baptist Hospital he began to complain of right flank pain. He had also had fever since the onset of his illness, and his temperature on admission here was 100.2. He continued to run a febrile course throughout his entire hospital stay. Also about three days prior to admission he had noticed some blood in his urine. There had been no dysuria or frequency. There had been some nausea but no vomiting. He had also complained of some shortness of breath.

PHYSICAL EXAMINATION

On physical examination he appeared to be an acutely ill, elderly, white male. There were diminished breath sounds in the right base posteriorly. There was a systolic murmur at the apex. There was normal rate and rhythm of the heart. The abdomen was distended and there was tenderness in the right costovertebral angle. The prostate was slightly enlarged on rectal examination.

The admission urinalysis showed a specific gravity of 1.035 with innumerable white and red blood cells. The admission hematology showed a hemoglobin of 15 gm. and a hematocrit of 46 volume per cent. The total white count was 23,300 with 4 per cent neutrophil bands, 75 per cent segmented neutrophils, 14 per cent lymphocytes, and 7 per cent monocytes. Chest fluid was aspirated on the day following admission and no acid fast bacilli could be seen on direct smears. These smears were negative for tumor cells. Blood chemistry on Feb. 7, 1961, showed a creatinine of 1 mg. per cent, a glucose of 86 mg. per cent, and a blood urea nitrogen of 12 mg. per cent.

X-ray films taken shortly following admission showed on PA, right lateral, and right lateral decubitus films that the heart was normal in size. The lung on the left appeared to be clear. On the right there was noted an elevated diaphragm leaf with a decubitus film showing a moderate amount of fluid in the right pleural space. There was considerable crowding of the basilar lung tissue by this elevated diaphragm leaf and pleural fluid. An excretory urogram on this date showed that psoas shadow on the right was very poorly outlined. The right kidney was at a slightly higher level than the left.

X-RAY DATA

After the intravenous injection of radiopaque medium, prompt excretion was seen bilaterally. Serial film studies showed normal calyces, pelvis, and ureter on the left. On the right there was seen a slight lateral displacement of the lower pole of the kidney and this lower pole was actually very poorly outlined. The ureter showed normal gross displacement although the appearance of this right ureter would suggest that it was under a mild degree of tension. The impression on the basis of these urograms was evidence of retroperitoneal abnormality on the right. Retrograde studies again confirmed the suspicion of a mass related to the lower pole of the right kidney. Again lack of a psoas shadow on the right was noted. There was evidence of poor filling of the lower pole calyx

on the right. On Feb. 10, 1961, an operation was performed.

Dr. Joel Alvis: "I'll go through this protocol first and then try to go back through it and pick out a few points which influence me regarding a diagnosis on this patient. He was a 69-year-old white male. He was admitted on Feb. 3 of this year. Approximately eight days previously he had been hospitalized elsewhere because of abdominal pain. Three days prior to admission here he began to complain of right flank pain. He had also had a fever since the onset of the illness. The temperature on admission was 100.2 degrees. He continued to run a febrile course throughout his entire hospital stay. Also about three days prior to admission he noted some blood in his urine, however there had been no dysuria or frequency. There had been some nausea but no vomiting. He also complained of some shortness of breath.

PROTOCOL REVIEW

"On physical examination he appeared to be an acutely ill, elderly, white male with diminished breath sounds in the right base posteriorly. There was systolic murmur at the apex. There was normal rate and rhythm of the heart. The abdomen was distended and there was tenderness in the right costovertebral angle. The prostate was slightly enlarged on rectal examination. The admission urinalysis showed a specific gravity of 1.035 with innumerable red and white cells.

"Admission hematology showed a hemoglobin of 15 gm., a hematocrit of 46 volume per cent. The total white count was 23,300 with 4 per cent neutrophils, 75 per cent segs, 14 per cent lymphocytes, and 7 per cent monocytes. Chest fluid was aspirated on the day following admission and no acid fast bacilli could be seen on direct smears. These smears were negative for tumor cells. Blood chemistry on Feb. 7 showed a creatinine of 1 mg. per cent, a glucose of 86 mg. per cent, and a BUN of 12 mg. per cent.

ADMISSION FILMS

"X-ray films taken shortly following admission showed an PA right lateral and right lateral decubitus films that the heart was normal in size. The lung on the left appeared to be clear. On the right there was noted an elevated diaphragm leaf with a decubitus film showing a moderate amount of fluid in the right pleural space. There was considerable crowding of the basilar lung tissue by this elevated diaphragmatic leaf and pleural fluid.

"An exploratory urogram on this date showed the psoas shadow on the right was very poorly outlined. The right kidney was at a slightly higher level than the left. After the intravenous injection of the radiopaque medium, prompt excretion was seen bilaterally. Serial film studies showed normal calyces and pelvis on the left. On the right there was seen a slight lateral displacement of the lower pole of the kidney, and this lower pole was actually very poorly outlined. The impression on the basis of these urograms was evidence of retroperitoneal abnormality on the right. Retrograde studies again confirmed the suspicion of a mass related to the lower pole of the right kidney. Again, lack of a psoas shadow on the right was noted. Evidence of poor filling of the lower pole calyx on the right was noted. On Feb. 10 an operation was performed.

"Here we have a 69-year-old man that we know has been ill for approximately two weeks. I judge that this was a rather acute onset or acute illness because there is nothing in the past history as far as we can tell from the protocol about any difficulty prior to his admission which was approximately 14 days before the surgery. One thing that seems to be prominent in the onset of the illness was pain, primarily pain on the right side. There is nothing to give us any clue as to what type of pain it was, whether it was colicky pain, an acute type, or a dull, aching pain.

INITIAL SYMPTOMS

"Of course, right here in the initial onset we have symptoms, such as pain, fever, and hematuria which just from the history would make one think of maybe a stone along the urinary tract, but the rest of the protocol does not especially bear that out. He had apparently been running a low grade fever through the entire course of the illness and his white count on admission here was markedly elevated: 23,000 with 75 per cent segs and 14 per cent lymphocytes. If it had been something involving the lower urinary tract, you would probably think that he might have some lower urinary tract symptoms. There is no history of any dysuria of frequency or burning on urination or pain that would make you think that this was anything which involved an infection which might cause some type of cystitis or urethritis.

ONE CLUE: HEMATURIA

"In going back and picking out one clue to consider as a point here, I simply picked the clue of hematuria. Now there is nothing in here to let me know exactly what type of hematuria this was, whether or not it was gross, painless hematuria, for instance. I judged from the way the thing was written that it was gross hematuria which could be seen, and of course, among some of the condi-

tions which we would have to consider would be a tumor.

"The condition that is most likely in a man of this age group is a hypernephroma which is the most common kidney tumor seen in this decade of life. A tumor involving the renal pelvis would also have to be considered. Another possible diagnosis is some type of sarcoma. They are not as common as the others, but they do occur, particularly lymphosarcoma.

POSSIBLE DIAGNOSES

"Certainly we would have to consider an extrarenal retroperitoneal tumor also because the films show a marked distortion of the lower pole of the right kidney which is rather poorly outlined. It doesn't look too much like the common type of distortion seen from a hypernephroma or an intrarenal tumor. It looks as though it might be some mass or something which actually has invaded the kidney causing pressure on the kidney. One of the things pointing to some type of sarcoma or retroperitoneal sarcoma is the pleural effusion on the right.

"Some elevation of the diaphragm on the right side can be seen on the chest films. Fluid aspirated from the right side was negative for acid fast organisms and negative for tumor cells. As I understand it, the fact that the aspirated fluid had no acid fast organisms is not too significant because on direct smears often times they are not seen.

"Two conditions are significant in this case: the chest findings and the involvement of the lower pole of the right kidney. The ureter has apparently been displaced and the kidney has been elevated on the right side. I believe it was noted that the right kidney was up higher than the left. This man was apparently acutely ill, so that you would think also that there was an acute infectious process involved in his illness.

OTHER CAUSES

"Some of the other causes which we will run through quickly that might be considered in hematuria would include nephritis. There is no history here of any hypertension, of any past albuminuria, or any edema of the lower extremities. I think on the basis of the films we can rule in or out a ureteral or renal calculus. Often times secondary to trauma one can develop a large retroperitoneal hematoma and one might even develop pleural effusion. We have, however, no history at all of any trauma occurring in the past.

"Tuberculosis is a condition which would have to be ruled out here. Tuberculosis of the genitourinary tract can cause renal pain. It can cause a palpable mass or gross hematuria. In the films none of the characteristic findings of the pelvis or calyces which are noted in tuberculosis can be seen, however. It could certainly cause the pleural effusion and the chest findings on physical examination. There is no report here on a sputum culture, whether or not one was done.

"A pyonephritis could cause the patient to have the elevation in his white count and could account for the urinary symptoms, but unless it had developed and gone on to a pyonephrosis with formation of a perinephritic abscess, I don't think it would account for all of the findings in this case. I considered a perinephritic abscess here with extension through the diaphragm. Most of the time, however, these will follow chronic renal infection of a long duration and there is no history here that would make me think that he had had infection for a long period of time.

CYST OF THE KIDNEY

"A cyst of the kidney could account for the large palpable mass in the lower pole of the kidney, but I have never seen a cyst of the kidney associated with hematuria, especially gross hematuria. With a large mass involving the kidney and associated hematuria you are always highly suspicious of some type of malignancy involving the kidney. Of course there are systemic causes of hematuria also such as purpura, hemophilia, and leukemia, but I don't think from the history and the laboratory findings we have here that these can be considered. Polycystic kidneys would have to be ruled out because the kidney on the left side was perfectly normal. His chemistries were normal. He had a creatinine of 1 and a BUN of 12.

"To summarize, here we have a man with a mass or probable mass involving the lower pole of the right kidney and also with the chest findings of fluid in the right chest. According to the radiology report, the heart was normal in size and the left lung fields were clear. The accumulation of fluid on the right side could be secondary to congestive failure. I think it is most likely not probable in this case where the heart is of normal size and this thing seems to be of a rather acute onset.

HYPERNEPHROMA

"Whenever you have a mass in the kidney with hematuria in this age group, a hypernephroma is one diagnosis that definitely has to be checked out. However, I think it would be rather unusual to get these chest findings with a hypernephroma,

although they do metastasize to the lungs and to the bones. I don't see any evidence on these films of a discrete metastatic lesion in the chest. I think that it would be probably more likely that a retroperitoneal tumor such as a retroperitoneal sarcoma or lymphosarcoma would cause the radiographic findings. What was the operation?"

Dr. Kenneth Heard: "The operation performed was a nephrectomy. The lower half of the kidney was replaced by a hemorrhagic tumor mass composed mainly of homogenus, yellowish tissue. Microscopically, this proved to be a renal cell carcinoma of the so-called granular cell type. We divide these into clear cell, granular cell, and anaplastic types because of prognostic implications. There was also extension into the pelvis, accounting for the filling defect, and extension into the renal vein.

"This case was of interest to me because the clinicians were oriented somewhat toward an inflammatory lesion because of the febrile course. This may not have been emphasized enough in the protocol. In some series of renal cell carcinoma, there have been reported as many as 20 per cent of the cases presenting with the main complaint of fever."

Dr. Alvis: "I can recall two cases within the past two years in which fever of undetermined origin was the only finding in patients who later were proved to have hypernephroma."

Final Diagnosis: Renal cell carcinoma (granular cell type) with extension into renal pelvis and venous involvement. ★★★

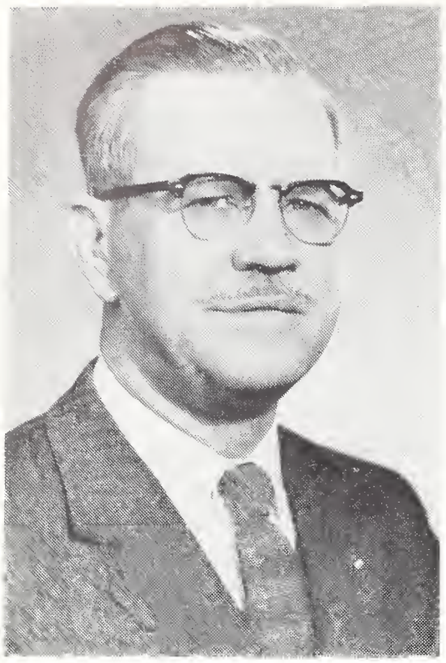
1190 North State Street

PSYCHOLOGIC LICENSURE

Highway accidents could be reduced, a Los Angeles scientific team has decided, if only the state motor vehicle department would use some psychology when they hand out the drivers' licenses. By studying 331 amateur sports drivers, the researchers found that the driver factor usually tied to accidents—physical characteristics, visual abilities, reaction time, even experience actually have no significant effect on the accident rate. What brings about a driving accident is a driving error. The "definitive indications" are that those who commit most of the driving errors would be turned up in psychological tests—people who have subnormal ethical awareness, who reject the social customs and like to take personal risks "There is little question but that psychological testing, if properly applied, could be of major benefit in licensing drivers," the scientists reported.

P.S. Among the characteristics of license applicants the researchers would screen out is proneness to abstract thought.

—*The Insider's Newsletter*



The President Speaking

'What's for Nothing?'

LAWRENCE W. LONG, M.D.
Jackson, Mississippi

A VERY WISE MAN once said that ". . . failure is the only thing you can get for nothing." At our 93rd Annual Session, Dr. Swink Hicks, to whom your president pays high tribute and respect for his outstanding administration, told us we cannot and shall not fail. This frame of reference is appropriate for the 1961-62 association year upon which we have entered. The many problems facing us at local, state, and national levels are such as to make our tasks challenging and difficult. But MSMA's 104 years of growth and progress provide us a legacy of dedication which denies any inclination toward failing our responsibilities.

I offer you a six point program which includes both general and specific goals and within which we can accomplish much.

First, we are doctors of medicine. As such, our association can be no stronger than the weakest link. Let us, therefore, build our membership to include every eligible physician in Mississippi.

Second, we must communicate effectively with one another as regards our scientific, socioeconomic, and organizational responsibilities. Let us continue to improve our JOURNAL MSMA and build its circulation.

Third, and perhaps our greatest responsibility, is our obligation to our patients. Let us work unceasingly to improve medical service for all Mississippians.

Fourth, we need additional means to realize our third goal and toward that end, we must give new and vigorous impetus to our legislative effort with study and assistance at all levels down to and including the grassroots.

Fifth, we must think of our next medical generation and the legacy we can leave them. We must encourage the teaching of medical ethics, socioeconomics, and public speaking in our medical schools.

Sixth, we must strive for unification and organizational harmony. Thus, it is expected that every member of the association—and most particularly the officers and those in leadership positions—follow and accept policy pronouncement of the House of Delegates, supporting his association and the majority without reservation.

The 1961-62 year can be rewarding but inaction will exact a high price in failure. Our association is a team, able and competent, but we must work and devote ourselves to our profession to succeed. ★★★

Constitution and By-Laws of the Mississippi State Medical Association

CONSTITUTION

Preamble

That more may live longer in the richness and comfort of health; that pain, suffering, and disease may be eradicated to the extent made possible by scientific medical knowledge; that the standards of the medical profession may be maintained on the highest plane of honor, we dedicate ourselves as physicians through this Association. Among us, membership is a privilege, earned by professional qualification, personal honor, and selfless service; it is not a right vested superficially nor by statutory licensure. Truth shall be our quest; diligence, our staff; and service, our purpose.

Article I

NAME OF THE ASSOCIATION

The name and title of this Association shall be the Mississippi State Medical Association.

Article II

PURPOSE OF ORGANIZATION

The purpose of this Association shall be to federate and bring into one compact organization the entire medical profession of the State of Mississippi and to unite with similar associations in other states to form the American Medical Association, with a view toward the extension of medical knowledge, and to the advancement of medical science; to the elevation of the standard and medical education, and to the enactment and enforcement of just medical laws, to the promotion of friendly intercourse among the physicians and to guarding and fostering of their opinion in regard to the great problems of medicine, so that the profession shall become more honorable and capable within itself, and more useful to the public in the prevention and care of disease, and in the prolonging of and adding comfort to life.

The purpose of this Association shall be to promote scientific medical research and practice and shall be a non-profit organization.

Article III

COMPONENT SOCIETIES

Component Societies shall consist of those societies which hold charters from the Association.

Article IV

MEMBERSHIP

Section 1. Members of the Mississippi State Medical Association. Members shall be active, associate, emeritus, or scientific, according to requirements and provisions of the By-Laws. There may also be invited guests. All degrees of membership other than associate and scientific shall be construed as active in connection with the rights and privileges accruing therefrom.

Section 2. Guests. Any physician not a resident of the state may become a guest during any annual session upon invitation of a member of the Association, and shall be accorded the privilege of participating in all the scientific work of that session.

Article V

SESSIONS AND MEETINGS

Section 1. The Association shall hold an annual session during which there shall be held daily not less than two general meetings, which shall be open to all registered members and guests.

Section 2. The time and place for holding the annual session shall be fixed by the House of Delegates, but in emergencies, the Board of Trustees shall have the power to fix, or change, either the time or the place, or both of the annual session.

Article VI

GENERAL OFFICERS

Section 1. The general officers of this Association shall be a President, President-elect, three Vice-Presidents, one from each Supreme Court District, Secretary-Treasurer, Speaker, Vice Speaker, and Editor.

Section 2. The President, President-elect, and Vice-Presidents shall hold terms of one year. The Secretary-Treasurer, Speaker, Vice Speaker and Editor shall be elected for terms of three years.

Section 3. The officers of this Association shall be elected by the House of Delegates on the last day of the annual session following the adjournment of the general meeting, but no person shall be elected to any such office who has failed to attend two-thirds of the past two and current annual sessions and who has not been a member for the past two years.

Section 4. In addition to these general officers, there shall be an Executive Secretary who need not be a physician or member of the Association. He shall be appointed by the Board of Trustees and shall serve at the pleasure of the Association. His compensation and expenses for duties performed shall be fixed by the Board of Trustees and confirmed by the House of Delegates.

Article VII

EXECUTIVE OR CENTRAL OFFICES

The Executive Secretary shall maintain in the city of Jackson suitable offices for the discharge of his duties and for conducting the administrative affairs of the Association.

Article VIII

HOUSE OF DELEGATES

The House of Delegates shall be the legislative, business, and policy-making body of the Association and shall consist of (1) delegates selected by the component societies under authorized apportionment, (2) the general officers of the Association, (3) all past presidents, provided they still be members in good standing of the Association, (4) members of the Board of Trustees and Councils, and (5) elected committees, Delegates and Alternate Delegates to the American Medical Association, members of the State Board of Health, and members of the Board of Trustees of Mental Institutions, all of whom must be members of this Association.

Article IX

BOARD OF TRUSTEES

The Board of Trustees shall be the executive and governing body of the Association during vacation of the House of Delegates and shall perform such duties as are prescribed by law governing directors of corporations and in the By-Laws of the Association. The Board shall consist of nine members, one from each Association District, elected for terms of three years each. A Trustee shall not serve more than three consecutive terms.

Article X

FUNDS AND EXPENSES

Funds for meeting the expenses of the Association shall be arranged for by the House of Delegates by annual dues, per capita assessments upon the membership, and by voluntary contributions. Funds may be appropriated by the House of Delegates to defray the expenses of the annual session, publications, and for any other purpose approved by the House of Delegates.

Article XI

THE SEAL

The Association shall have a common Seal with power to break, change or renew the same at pleasure.

Article XII

AMENDMENTS

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates registered at the annual session, provided that such amendment shall have been presented in open meeting at the previous annual session, and that it shall have been sent officially to each component society at least two months before the session at which final action is taken.

BY-LAWS

Chapter I

MEMBERSHIP

Section 1. Eligibility. Each component society of the Mississippi State Medical Association shall judge the qualifications of candidates for election to membership therein, which shall be restricted to those persons who hold the degree of Doctor of Medicine from an appropriately accredited source as defined by the American Medical Association, or in lieu thereof, a foreign degree in medicine which is an acceptable equivalent to the Board of Trustees and shall be a citizen of the United States. All candidates for any degree of membership other than associate must be legally licensed to practice medicine in Mississippi. Persons who obtained this degree prior to January 1, 1917, need not comply with this requirement but must be licensed to practice medicine in Mississippi or, if offering to practice in Mississippi must be eligible for license by reciprocity and be a member in good standing of a constituent (state) association of the American Medical Association. Membership in a component society, evidenced by the payment of dues for the current year, shall be a prerequisite to membership in the Association, except that a physician upon his initial application for membership in a component society of the Association shall be required to undergo a waiting period of ninety (90) consecutive days from the date he begins the practice of medicine in the geographical area of the component society before he may be elected to membership in the component society. No physician shall be eligible for membership who has been convicted of or who has plead guilty to either a felony or a violation of a state or federal narcotics law. The duly certified court record shall be *prima facie* evidence of pleas and convictions and cause automatic revocation of membership.

Section 2 (a). Good Standing. Only those members in good standing shall be entitled to the rights and privileges of membership. A physician not in good standing may not be elected to office nor exercise the privilege of voting or attending any session of this Association, scientific or otherwise. The name of a physician upon the properly certified roster of a component society which has paid its annual assessment shall be *prima facie* evidence of his right to register at the annual session of the Mississippi State Medical Association. No member shall participate in any of the proceedings of the annual session until he is duly registered. No delegate or other member shall take part in any of the proceedings of an annual session until he has compiled with the provisions of this section. (b) Change of State Residence. In the event that a member moves from the State, his membership shall continue until, and lapse at the end of, the current fiscal year, but this provision shall not operate to prevent a physician who moves from the state continuing his membership by payment of all dues and assessments to the state Association. (c) Obligations of Membership. When the Executive Secretary of the Mississippi State Medical Association is officially informed by the secretary of a component society that a physician is not in good standing in the component society, he shall remove the name of the physician from the rolls of the Association. A member shall hold his membership through the component society in the jurisdiction of which he practices, provided that a physician living on or near a county line may hold membership in the society most convenient for him to attend. If the society in which he chooses to secure membership does not exercise jurisdiction over the area of his residence, then permission must be obtained from the jurisdiction society to facilitate his affiliation with the extra-jurisdiction society.

Section 3. Degrees of Membership. Members of the Mississippi State Medical Association shall be divided into the following classifications: Active, emeritus, associate, and scientific. (a) Active Membership. Active members shall include all eligible members of component societies in good standing, providing that all dues and assessments in this Association as may be hereinafter prescribed have been received by the Association. (b) Emeritus Members. Any member of the Mississippi State Medical Association who has been an active member for any ten consecutive years and shall have permanently retired from the practice of medicine shall be eligible for election to emeritus membership. Election to emeritus membership for reason of retirement in the case of permanent and total disability shall merit special consideration but shall be subject to ruling by the Board of Trustees. Election to emeritus membership shall be based on the recommendation of the component society and the approval of the Board of Trustees. (c) Associate Membership. Any commissioned medical officer in the United States Army, United States Air Force, United States Navy, or United States Public Health Service, or any physician in the employ of the Veterans Administration, not licensed to practice in the State of Mississippi, stationed in Mississippi, members of medical faculties of medical schools in Mississippi, approved by the American Medical Association, who are not licensed to practice in the state, any hospital intern, or any hospital resident in Mississippi, may, on election to associate membership by the component society in whose jurisdiction the physician resides become an associate of the Mississippi State Medical Association. Associate members shall not vote or hold office. (d) Scientific Membership. Physicians meeting the professional quali-

fications set forth in Chapter I, Section 1, may be elected scientific members by component societies. The rights and privileges of scientific membership shall be limited to participation in the scientific work of the association and such members shall not vote or hold office. Scientific members shall pay no dues to component societies or the state Association. In addition to these provisions, the privileges of scientific membership shall be subject to rulings of the Board of Trustees.

Section 4. Dues and Assessments. A per capita assessment determined by the House of Delegates shall constitute the dues of the Association, which assessment shall be collected from all active members by the respective secretaries of the component societies, provided that new members shall be accepted on payment of three-fourths of annual dues after May 1 and one-half of annual dues after September 1. Each active member shall pay the prescribed dues to the officer designated by the component society for transmittal to the Executive Secretary of the Association. Dues shall include a subscription to the official publication of the Association. (a) Members Excused From Payment. The Board of Trustees may, by majority vote, excuse a member from payment of dues because of undue hardship or similar circumstances warranting special consideration provided that the component society shall have excused in full the payment of dues for periods exceeding one year. Such circumstances shall be interpreted to include extended illness and temporary disability. (b) Emeritus Members. Physicians who have been elected emeritus members shall not be required to pay dues in the Association. (c) Payment of Dues and Delinquency. Dues of the Association are due and payable on December 31 of the year prior to that for which dues are prescribed. Failure to pay dues by April 1 of the year for which due shall result in forfeiture of membership privileges and the removal of the member's name from the rolls of the Association. A five dollar ($5.00) reinstatement cost shall be assessed against any member who is delinquent by reason of non-payment of dues after April 1 of the year for which dues are payable. A member in good standing who is called to active duty with the Armed Forces of the United States other than in the regular component shall be carried as an active member without payment of dues until such time as he is released from military service; receipt of publications of the Association during such period shall be at the expense of the member.

Section 5. American Medical Association. Members of this Association shall pay the dues or hold a legal exemption from the dues of the American Medical Association. These dues shall be paid through the component society to the Executive Secretary of the Mississippi State Medical Association, whose duty it shall be to transmit them to the American Medical Association and to obtain proper credits and receipts therefor.

Section 6. Revocation of Emeritus or Associate Membership. Any emeritus or associate membership may be revoked by two-thirds vote of the House of Delegates when, in the opinion of the House of Delegates, the conduct or actions of the emeritus or associate member violates any of the principles of the code of ethics or whose conduct or actions are not becoming to the honor conferred.

Chapter II

ANNUAL AND SPECIAL SESSIONS

Section 1. Time and Place. An annual session shall be held as required by Article V, Section 1, the Constitution of the Mississippi State Medical Association, which session shall in any event be held prior to the annual session of the American Medical Association. The place of the state session shall be fixed in accordance with Article V, Section 2, the Constitution of the Mississippi State Medical Association.

Section 2. Special Session. A special session of the Association or of the House of Delegates may be called by the President, with the approval of the Board of Trustees. The Board of Trustees is empowered to call a special session by majority concurrence.

Section 3. Inviting an Annual Session. A component society desiring the Association and House of Delegates to meet in annual session in a city within its jurisdiction may submit an invitation in writing or verbally through its representative to the House of Delegates at the annual session concerned with the selection of the site for the next regular scheduled meeting. The dates and site of the annual session selected may be changed by majority vote of the Board of Trustees in an emergency requiring such a change.

Section 4. Registration Privileges. Only the following shall be permitted to register at any session:

(a) Active members
(b) Emeritus members
(c) Associate members
(d) Invited guests
(e) Medical students of American Medical Association approved medical schools who are certified to the Executive Secretary of the Association by their respective deans.
(f) Interns and residents who are graduates of American Medical Association approved medical schools and who are connected with an approved hospital and who are certified to the Executive Secretary of the Association by their respective hospital superintendents in event they are not associate members of the Association.
(g) Commissioned medical officers of the United States Armed Forces who are on active duty and who if not associate members are certified to the Executive Secretary by their Post or Base Surgeons or Commanding Officers.
(h) Scientific members.

Section 5. Indebtedness. A member shall not be permitted to register unless all current indebtedness to both the Association and component of proper jurisdiction has been paid.

Section 6. Admittance. Admittance to any meeting of the House of Delegates, any scientific section, or any of the various exhibits at an annual session of the Association shall be limited to members in good standing, duly registered and invited guests, members in good standing of the Woman's Auxiliary to the Mississippi State Medical Association, duly accredited and registered members of the Press, and accredited technical and scientific exhibitors.

Chapter III

GENERAL MEETING

Section 1. Participation. The general meeting shall include all registered members and guests, who shall have equal rights to participate in the proceedings and discussions, but no member shall vote on any question coming before a section of the general meeting except those who have registered as members of such sections. Each section of the general meeting shall be presided over by its chairman. The address of the President and the Distinguished Service Oration shall be delivered before the general meeting at such time and place as may be arranged.

Section 2. Order. The order of exercise, papers, and discussions as set forth in the official program shall be followed from day to day until it has been completed. But no section shall be allowed to place more than five papers on its program, nor more than two invited guest essayists (out-of-state or non-member). When a section program is not completed within the time assigned, it shall not be allowed to continue into that assigned to another section.

Section 3. Time Restrictions. No address or paper before the Association, except those of the President and Orator, shall occupy more than twenty minutes in its delivery, except that guests may be allowed thirty minutes; and in formal discussion no one shall speak

more than five minutes; and in informal discussion no one shall speak more than three minutes and not more than one time.

Section 4. Essayists. With the exception of the invited guests, the essayists must be members of the Association. No name shall appear more than once on the printed program to discuss a paper before the regular scientific sections unless such person qualifies for membership as provided in these By-Laws.

Section 5. Papers. All papers read before the Association shall be its property. Each paper must be read by its author, and must be deposited with the Secretary when read.

Section 6. Failure to Read Paper. No author listed on the program who fails to read a paper at the session may be allowed a place on the program of the next annual session, but if the author, being unable to attend, shows his good intent by forwarding his paper to the Secretary before the annual session, he shall not suffer the penalty.

Chapter IV

SCIENTIFIC SECTIONS

Section 1. Designation of Sections. The scientific sections of the Association shall be as follows: (a) Section on Medicine, (b) Section on Surgery, (c) Section on Preventive Medicine, (d) Section on Eye, Ear, Nose and Throat, (e) Section on Pediatrics, (f) Section on Obstetrics and Gynecology, and (g) Section on General Practice.

Section 2. Section Officers. Each scientific section of the Association shall, as the last order of business during its regular meeting, elect a chairman and secretary who shall serve for a period of one year. A majority of votes cast shall be necessary to elect.

Section 3. Program. The Council on Scientific Assembly shall place any paper in its proper section. The Council shall so arrange the program that no one section shall be given precedence over others two years in succession.

Chapter V

HOUSE OF DELEGATES

Section 1. Apportionment and Representation. Each organized county shall be entitled to representation in all regular and special sessions of the House of Delegates, one delegate or one alternate for each fifty members in the county and one delegate or one alternate for each fraction thereof, but each organized county holding a charter from this organization having made its annual report and paid its assessments, as provided in this Constitution and By-Laws shall be entitled to at least one delegate or alternate, said alternate delegates to act only in the absence of the delegate or delegates from the respective counties. No county in a component society shall be without representation in the House of Delegates; each shall be entitled to one delegate and one alternate without regard to total membership. No alternate may be seated at any regular or special session of the House of Delegates unless the delegates elected from that county shall be absent or otherwise unable to participate in the proceedings. In the event that neither the delegate nor the alternate is able to attend the regular or special session to which they have been accredited, then any *bona fide* resident of the county may, if properly registered, qualify himself as a delegate. No representative of the component society shall be seated in the House of Delegates until all his dues, assessments, and obligations to the component society have been paid. Delegates and alternates shall be elected by their respective component societies for terms of not less than two years and shall assume office on the first day of the annual session following their elections; they shall be *bona fide* residents of the counties which they represent. Their names shall be reported to the Central Office of the Association not later than thirty days prior to the first day of the annual session. Representatives of component societies shall be seated in the House of Delegates only following their proper registration of credentials from the component societies they represent.

Section 2. Meetings and Attendance. The House of Delegates shall meet annually on the first day of the annual session of the Association, and there shall be at least one scientific meeting scheduled for that day. The House of Delegates shall meet for the conclusion of business on the last day of the annual session immediately following the adjournment of the last general or scientific session, provided that these requirements shall not operate to prevent such other meetings of the House of Delegates during the annual session as the House itself may order or the President or Speaker may deem necessary, but no such meetings may be called at times which would conflict with the scheduled general or scientific session. Duly registered members and guests may attend all meetings of the House of Delegates provided that they occupy a distinctly separate section of the meeting hall or auditorium and further provided that they shall not be permitted to participate in any phase of the meeting of the House of Delegates except on invitation of that body. By majority vote, the House of Delegates may enter into executive session, during which time only qualified delegates and officers of the Association may remain in attendance.

Section 3. Quorum. A three-fifths majority of registered and duly seated delegates of this Association shall constitute a quorum.

Section 4. Order of Business. The order of business shall be conducted at the pleasure of the House of Delegates, provided it shall not be in conflict with either these By-Laws or the Constitution. Meetings shall be conducted according to *Robert's Rules of Order, Revised*, and within the bounds of courtesy and this Constitution and By-Laws. Generally, the order of business shall be:

(1) Adoption of the Transactions of the previous meeting.
(2) Reports of Boards, Councils and Committees.
(3) Reports of Presidential Committees.
(4) Special Orders.
(5) Unfinished Business.
(6) New Business.

Section 5. Memorials and Resolutions. No memorials or resolutions shall at any time be issued in the name of the Mississippi State Medical Association by any officer or member thereof until such memorial or resolution has been approved and adopted by the House of Delegates or Board of Trustees.

Section 6. Duties and Responsibilities. It shall, through its officers and otherwise, give diligent attention to foster the scientific work and spirit of the Association, and shall constantly study and strive to make each annual session a stepping stone to future ones of higher interest. It shall consider and advise the public in those important matters wherein it is dependent upon the profession, and shall use its influence to secure and enforce all proper medical and public health legislation and to diffuse popular information in relation thereto. It shall make careful inquiry into the condition of the profession of each county in the state, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist, and for organizing the profession in the counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse between physicians of the same locality, and shall continue these efforts until every physician in every county in the state has been brought under medical society influence. It shall encourage postgraduate work in medical centers, as well as home study and research, and shall endeavor to have the results utilized and intelligently discussed in the component societies. It shall elect representatives to the House of Delegates of the American Medical Association in ac-

cordance with the Constitution and By-Laws of that body, the term of office to begin on January 1 of the year following that of the elections and continuing for two successive years. It shall, upon recommendation of the Board of Trustees, provide and issue charters to counties organized to conform to the spirit of the Constitution and By-Laws.

Section 7. Reference Committees. Business brought before the House of Delegates will normally be referred by the Speaker for hearing, debate, and recommendation to a reference committee. Sufficient reference committees shall be appointed by the President to expedite and assist in the deliberations of the House of Delegates. Such committees shall consist of not less than three nor more than five members, all of whom shall be members of the House of Delegates, who shall serve only during the regular or special session for which appointed. Any member of the Association shall have the privilege of appearing before a reference committee on any issue being considered. Additionally, reference committees may permit the appearance of any individual who, in the opinion of the committee, can assist its deliberations.

Chapter VI

ELECTION OF OFFICERS

Section 1. Ballot. All elections shall be by secret ballot, and a majority of the votes cast shall be necessary to elect.

Section 2. Nominations. The House of Delegates on the first day of the annual session shall select a Committee on Nominations consisting of nine members of the House of Delegates, one from each Association District. It shall be the duty of this committee to consult with the members of the Association and to hold one or more meetings at which the best interests of the Association and of the profession of the state for the ensuing year shall be carefully considered. The committee shall nominate to the House of Delegates three names for each general officer vacancy and two names for all other offices. No two candidates for President-elect may be named from the same county. Nominations for appointment to membership on the Mississippi State Board of Health shall be made by the House of Delegates in accordance with Section 7024, Mississippi Code of 1942, provided that six names shall be submitted, three of whom shall be elected and their names submitted to the Governor as nominees from each district, provided no member shall be nominated who has served two consecutive terms. The House of Delegates shall nominate five physicians when vacancies occur on the Board of Trustees of Mental Institutions which nominations shall be submitted to the Governor in accordance with law.

Section 3. Report of Nominations. The House of Delegates shall receive the report of the Committee on Nominations and elect officers, Trustees, and Council members on the last day of the annual session.

Section 4. Nominations from the Floor. Nothing in this Chapter shall be construed to prevent additional nominations being made from the floor by members of the House of Delegates.

Section 5. Executive Secretary. The Board of Trustees shall select and appoint an Executive Secretary as elsewhere prescribed in the Constitution and By-Laws of the Association.

Chapter VII

DUTIES OF OFFICERS

Section 1. President. The President shall have general supervision over all meetings of the various bodies of the Association, shall appoint all committees not otherwise provided for, shall deliver an annual address at such time and place as may be arranged, and shall perform such other duties as custom and parliamentary usage may require. He shall fill by appointment all vacancies occurring during his tenure of office among the general officers and on the Board of Trustees and Councils and shall be empowered to appoint such committees on an *ad hoc* basis as may be desired or required to conduct the affairs of the Association. He shall be an *ex officio* member of all Councils and committees. He shall be the real and acknowledged head, as well as the personal representative, of the medical profession of the State of Mississippi during his term of office, and insofar as practicable, shall visit by appointment the various sections of the state and the component societies of the Mississippi State Medical Association and assist the Trustees in their tasks of aiding and strengthening the component societies and in making their work more useful.

Section 2. President-elect. The President-elect shall be in charge of the work of organization, including membership, under the direction of the President, and shall exercise these duties and advise with the Vice Presidents and with the Board of Trustees in this phase of their activity. He shall be an *ex-officio* member of all Councils and committees. He shall succeed to the presidency upon the event of the death, resignation, or removal from office of the President. This automatic succession shall not operate to disqualify him from serving the next regular term of office unless he has served more than six months as President.

Section 3. Vice Presidents. The Vice Presidents shall assist the President in the discharge of his duties. They shall further assist the President-elect in the work of organization, including membership in their respective areas, and in promoting the welfare of the Association and the profession of the state.

Section 4. Speaker. A Speaker shall be elected for a term of three years. This officer may be chosen from the membership of the Association, irrespective of any affiliation with the House. The Speaker shall familiarize himself with the rules and usages of parliamentary procedure, with the laws of the House. On him shall devolve the duty of bringing before the House through the various officers and chairmen all reports and other matters that are to receive its attention. He shall preside at all meetings of the House and perform the duties usual to the position and office of chairman except in the appointment of committees, which shall be the privilege of the President.

Section 5. Vice Speaker. A Vice Speaker shall be elected for a term of three years to run concurrently with that of the Speaker. The Vice Speaker shall assist the Speaker in all duties prescribed in these By-Laws.

Section 6. Secretary-Treasurer. The Secretary-Treasurer shall be elected for a term of three years. He shall perform such duties ordinarily devolving on a secretary of a corporation by law, custom, or parliamentary usage and shall enjoy the rights and perform such other duties as may be granted or imposed in the Constitution and these By-Laws. He may delegate such duties as are herein described to the Executive Secretary who shall be responsible therefor. He shall be an *ex-officio* member of all Councils and committees.

Section 7. Executive Secretary. The Executive Secretary shall be appointed by the Board of Trustees and shall serve at the pleasure of the Association. He need not be a member of the Association nor a physician. He shall maintain a Central Office for the Association and shall be responsible for the management and proper functioning of the Central Office to the President of the Association and the Board of Trustees. He shall attend all sessions and meetings of the Association, the House of Delegates, the Board of Trustees, and shall serve at all times to perform such other duties as may be deemed beneficial to the Association by the President and Board of Trustees. He shall assist elected officers, Councils, committees, and Trustees in the performance of their duties. Under instructions from the President, he shall conduct a comprehensive program of public education and all such other activities as may disclose favorably to the public at large the aims, objectives, and goals of service of the medical profession in Mississippi. He shall, when requested, place himself in position to assist any of the component societies of the Association and he shall

attend meetings of the component societies when invited by officers thereof. He shall be made custodian of records, books and papers belonging to the Association and he shall keep account of and promptly place under the supervision of the Secretary-Treasurer such funds as may be delivered into his hands in the name of the Association. He shall give bond at the expense of the Association in such amount as may be required. He shall provide for the registration of the members and delegates at the annual session and cooperate in preparing for and arranging all functions of the Association, including the annual session. He shall procure an exact transcript of all proceedings of the House of Delegates. He shall maintain a register of all legal practitioners in Mississippi and he shall maintain detailed and exact records of the membership with regard to component societies, the Mississippi State Medical Association, and the American Medical Association. He shall issue evidence of membership to each physician who pays the annual assessment and is accepted in the Mississippi State Medical Association. He shall maintain close and complete liaison with the American Medical Association and shall keep the component societies informed of activities, programs, and mandates of both the state Association and the American Medical Association. He shall publish from the Central Office such memoranda, bulletins, and miscellaneous publications as may be directed by the President, the Board of Trustees, and the House of Delegates. He shall conduct the official correspondence of the Association as he may be directed. He shall employ such assistants as may be required, upon authorization of the Board of Trustees. He shall supply each component society with blank forms to be used in connection with membership and reports. He shall maintain records of monies paid by the component societies for assessments and dues. He shall prepare and publish under the direction of the President and Board of Trustees such programs as may be necessary for official functions of the Association. He shall be reimbursed for expenses incurred in the performance of his duties, separately and in addition to his regular compensation.

Chapter VIII

BOARD OF TRUSTEES

Section 1. Board of Trustees. The Board of Trustees shall be the executive and governing body of the Association during vacation of the House of Delegates. It shall consist of nine members, one from each Association District, where terms of office shall be three years and so arranged that only three members are elected annually. A Trustee shall not serve more than three consecutive terms. During vacation, the Board of Trustees shall exercise the powers conferred upon the House of Delegates by the Constitution and these By-Laws, provided that in the exercise of these powers thus conferred, the Board of Trustees shall neither consider nor act to contravene any action, mandate, or policy of the House of Delegates which may still be in effect.

Section 2. Officers of the Board. The Board of Trustees shall elect from its membership a Chairman, a Vice Chairman, and a Secretary for terms of one year during the last day of the annual session following adjournment of the House of Delegates. These officers of the Board shall compose its Executive Committee. The duties of the Secretary may be delegated to the Executive Secretary who shall maintain such special records and transcripts of meetings as the Board may desire.

Section 3. Meetings of the Board. The Board of Trustees shall meet daily during the annual session of the Association and at such other times as necessity may require, subject to the call of the Chairman or on petition of any three members of the Board.

Section 4. Executive Committee. The Executive Committee of the Board of Trustees shall be empowered to act in behalf of the Board on all matters delegated to it by majority vote of the Board. The acts of the Executive Committee, however, shall be subject to confirmation by the Board.

Section 5. Reports of the Board of Trustees. The Board of Trustees shall make an annual report to the House of Delegates and such supplemental reports as necessity may require at a time designated in the regular transaction of the business of the House. The report shall be made by the Chairman, the Vice Chairman, the Secretary, or the Executive Secretary. The reports of the Board shall be made a portion of the annual transactions and proceedings of the Association.

Section 6. Duties of Trustees. Each Trustee shall be organizer and arbiter for his Association District. He shall visit the component, medical societies within his District during each year and shall make an annual report of his activities and of the condition of the medical profession of each county of his District. Each Trustee shall be reimbursed for expenses incurred by him in traveling within his District or attending special meetings in the performance of his official duties, which will be allowed upon presentation of an itemized and documented account. This provision shall not be construed to include his expenses in attending the annual session of the Association.

Section 7. Public Policy. The Board of Trustees shall have the right to communicate the views of the medical profession and of the Association in the State of Mississippi with regard to matters of medical science, health, sanitation, and allied spheres of activity. It shall approve all memorials and resolutions issued but shall not issue memorials and resolutions heretofore prohibited in these By-Laws.

Section 8. Association Districts. The State of Mississippi shall be subdivided into Association Districts by counties, provided that all counties in a component society shall be in one Association District. These districts are defined as follows:

District 1: Bolivar, Coahoma, Humphreys, Leflore, Quitman, Sunflower, Tallahatchie, Tunica, and Washington.
District 2: Benton, DeSoto, Lafayette, Marshall, Panola, Tate, Tippah, Union, and Yalousha.
District 3: Alcorn, Calhoun, Chickasaw, Clay, Itawamba, Lee, Lowndes, Monroe, Noxubee, Oktibbeha, Pontotoc, Prentiss, and Tishomingo.
District 4: Attala, Carrol, Choctaw, Grenada, Holmes, Montgomery, and Webster.
District 5: Hinds, Issaquena, Leake, Madison, Rankin, Scott, Sharkey, Simpson, Smith, Warren, and Yazoo.
District 6: Clark, Kemper, Lauderdale, Neshoba, Newton, and Winston.
District 7: Covington, Forrest, George, Greene, Jasper, Jefferson Davis, Jones, Lamar, Marion, Pearl River, Perry, and Wayne.
District 8: Adams, Amite, Claiborne, Copiah, Franklin, Jefferson, Lawrence, Lincoln, Pike, Walthall, and Wilkinson.
District 9: Hancock, Harrison, Jackson, and Stone.

Chapter IX

COUNCILS

Section 1. Councils. Councils of the Association shall be elected standing bodies of the House of Delegates, responsible thereto. There shall be a Council on Medical Service, a Council on Scientific Assembly, a Judicial Council, a Council on Socioeconomic Affairs, a Council on Constitution and By-Laws, a Council on Legislation, a Council on Budget and Finance, an Editorial Council, and a Council on Medical Education. A Council member shall not serve more than three consecutive terms.

Section 2. Council on Medical Service. The Council on Medical Service shall be charged with the responsibilities of ascertaining and studying all aspects of medical care in Mississippi. It shall examine and make available all facts, data, and opinion on timely and adequate medical care. It shall investigate social and economic aspects of medical care and report its evaluations and findings. It shall suggest means of distribution of adequate quality medical service to the public consistent with the policies of the Association. It shall act as a factfinding and advisory body of the Association. Under its jurisdictions, there shall be assigned the activities of the Association in medical service, emergency service programs, indigent care, and allied medical agencies. There shall be one member from each Association District elected for a term of three years and so arranged that only three members shall be elected for full terms each year. The Council on Medical Service shall appoint Committees on Cancer Control, Occupational Health, Federal Medical Services, Maternal and Child Care, Mental Health, Diseases of the Heart, and Aging. Each committee shall consist of not less than five nor more than seven members appointed for periods of not less than one nor more than three years.

Section 3. Council on Scientific Assembly. The Council on Scientific Assembly shall be composed of the Secretary-Treasurer and the chairmen of the several scientific sections. The Secretary-Treasurer shall be Chairman of the Council. Upon this Council shall devolve the duties and responsibilities of planning the annual session to include all scientific activity and the programming and scheduling of annual session events. The Council shall be empowered to appoint such committees for terms not to exceed one year as may be necessary to assist in the discharge of these duties.

Section 4. Judicial Council. The Judicial Council shall consist of nine members elected for terms of three years each, one from each Association District. The judicial powers of the Association shall be vested in this Council whose decision shall be final. The Council shall have jurisdiction in all questions involving membership in the Association, all controversies arising under the Constitution and these By-Laws, interpretation and application of the Principles of Medical Ethics of the American Medical Association, controversies between two or more component societies of the Association and among members of the Association. The Council shall have appellate jurisdiction in questions and controversies referred to the state Association by appropriate and authorized bodies of component medical societies. Appeals shall be perfected within six months following the date of decision by the constituted authority of the component society. The Council, under these several authorities, may conduct such hearings as may be necessary and after due and legal processes may, by majority opinion, censure, suspend, or expel any member for infraction of the Constitution or these By-Laws.

Section 5. Council on Socioeconomic Affairs. The Council on Socioeconomic Affairs shall consist of nine members elected for terms of three years each, one from each District of the Association. The Council shall be charged with the responsibility of studying and inquiring into all socioeconomic aspects of medical practice from broad and inclusive viewpoints. It shall be concerned primarily with the economic problems confronting the individual practitioner and medical organization and shall monitor closely programs of government affecting medical practice. The Council shall have authority to designate and appoint such committees as may be necessary to assist in the discharge of these duties; such committees shall serve on an *ad hoc* basis not to exceed one year.

Section 6. Council on Constitution and By-Laws. The Council on Constitution and By-Laws shall consist of three members elected by the House of Delegates for terms of three years each. To this Council shall be referred all suggested amendments and changes in the Constitution and By-Laws of the Association for recommendation to the Board of Trustees and House of Delegates.

Section 7. Council on Legislation. The Council on Legislation shall consist of nine members, one from each association district, elected by the House of Delegates for terms of three years each which are so arranged that three members are elected annually. This Council shall analyze proposed legislation, recommending to the Board of Trustees courses of action for securing laws in the interests of public health, scientific medicine, as well as medical practice. It shall study and report the need for new and remedial legislation designed to serve the best interests of the state and nation. This Council shall be responsible to the Board of Trustees.

Section 8. Council on Budget and Finance. The Council on Budget and Finance shall consist of three members elected by the House of Delegates for terms of three years each. This Council shall receive reports of the finances of the Association and to it shall be referred all matters pertaining to the annual budget. The Council shall report annually to the House of Delegates, making specific recommendations on the annual budget of the Association. This Council shall be responsible to the Board of Trustees.

Section 9. Editorial Council. The Editorial Council shall consist of the Editor and the Associate Editors, elected by the House of Delegates to serve two years, and the former shall serve as chairman. To this Council shall be referred all reports of scientific subjects and all scientific papers and discussions presented before the Association and its component societies. The Council shall consider for publication in the official organ of the Association such papers, reports, and other data as may serve to further and advance scientific medicine in Mississippi. It shall exercise editorial authority over the official organ of the Association. This Council shall be responsible to the Board of Trustees.

Section 10. Council on Medical Education. The Council on Medical Education shall consist of three members elected by the House of Delegates for terms of three years each. To this Council shall be assigned the responsibilities of encouraging undergraduate and postgraduate study of medicine, licensure, and facilities for medical education in the state. This Council shall be responsible to the Board of Trustees.

Chapter X

COMMITTEES OF THE BOARD OF TRUSTEES

Section 1. Committees of the Board of Trustees. Standing committees of the Board of Trustees shall consist of the Advisory Committee to the Medical Auxiliary, Grievance Committee, and the Committee on Publications. All committees of the Board of Trustees shall be appointed by the Board for terms specified unless their selection is otherwise prescribed.

Section 2. Advisory Committee to the Medical Auxiliary. The Advisory Committee to the Medical Auxiliary shall consist of three members appointed for terms of three years each. The committee shall be charged with the responsibility of advising the Woman's Auxiliary to the Mississippi State Medical Association on matters of organization and program activity relating to the supportive role of the Auxiliary in its work with the Association.

Section 3. Grievance Committee. The Grievance Committee shall be appointed by the President with the advice and consent of the Board of Trustees. Its purpose shall be to prevent or resolve misunderstandings, to clarify and adjust differences between physician and patient, and to assist in maintaining the high levels of professional deportment already established by the *Principles of Medical Ethics*. The committee shall consist of nine members, one from each Association District, appointed for terms of three years each so as to provide for appointment of three members annually. Members of this committee shall not simultaneously serve on

any disciplinary or appeal body of the Association or its component societies. The committee shall have authority to compel a response either in writing or by personal appearance from any member of the Association, authority to initiate investigations on its own motion, and authority to file charges in the name of the committee before the Judicial Council of the Association. Under no circumstances shall the Grievance Committee ever exercise a disciplinary function and its power and authority shall be limited to the receiving of complaints, conduct of investigations, hearings, mediation, arbitration, and where necessary, referral of matters to appropriate bodies for adjudication or discipline. The committee shall prescribe its rules for operation which shall not be in conflict with generally accepted guides promulgated by the American Medical Association.

Section 4. Committee on Publications. The Committee on Publications shall consist of six members. These shall consist of Editor, the two Associate Editors, and three others, the three latter being appointed by the Board of Trustees for terms of three years which are so arranged to provide for appointment of one such member annually. The chairman of the committee shall be designated by the Board. The committee shall implement instructions and policies of the Board of Trustees relating to the official Journal of the Association. Additionally, the committee shall study and recommend to the Board policy proposals relating to organization and production of the Journal, reporting annually its deliberations.

Chapter XI

RULES AND CONDUCT

The Principles of Medical Ethics of the American Medical Association shall govern the conduct of members in their relations to each other and to the public.

Chapter XII

COMPONENT SOCIETIES

Section 1. Component Societies. All component societies now in affiliation with this Association or those that may hereafter be organized in this state, which have adopted principles of organization not in conflict with this Constitution and By-Laws shall, upon application to the Board of Trustees and approval by the House of Delegates, receive a charter from and become a component part of this Association. The Board of Trustees and House of Delegates, on recommendation by the Judicial Council, shall have authority to revoke the charter of any component society whose actions are in conflict with the letter and spirit of this Constitution and By-Laws.

Section 2. Number of Societies. Only one component medical society shall be chartered in any county but nothing in this section shall be construed as to prohibit unofficial organization of medical clubs or other county level groups of physicians whose purpose it is to further and advance scientific medicine and postgraduate medical education.

Section 3. Members of Societies. Each component society shall judge the qualifications of its own members, but as such societies are the only portals to this Association and to the American Medical Association, every reputable and legally registered physician who is qualified under Chapter I, Section 1, of these By-Laws shall be eligible for election to membership, provided scientific members shall also qualify under Chapter I, Section 3, subsection (d) of the By-Laws. Before a charter is issued to any component society, full and ample opportunity shall be given to every such physician in the county to become a member.

Section 4. Right of Appeal. Any physician who may feel aggrieved by the action of the society of his county or District in refusing him membership, or in suspending or expelling him, shall have the right to appeal to the Judicial Council, which, upon a majority vote, may permit him to petition for membership in an adjacent society.

Section 5. Evidence of Appeals. In hearing appeals, the Judicial Council may admit oral or written evidence, as in its judgment will best and most fairly present the facts, but in case of every appeal, efforts at a conciliation and compromise shall precede all such hearings.

Section 6. Area Jurisdiction. A physician living on or near a county line may hold his membership in that county most convenient for him to attend, on permission of the society in whose jurisdiction he resides.

Section 7. Professional Authority. Each component society shall have general direction of the affairs of the profession in its jurisdiction and shall constantly use its influence to the moral and professional betterment of its physicians, to the end that the membership shall embrace every qualified physician in its jurisdiction.

Section 8. Meetings. Frequent meetings shall be encouraged, and the most attractive programs arranged that are possible. The younger members shall especially be encouraged to do postgraduate work, and to give the society first benefit of such labors. Official positions and other preferments shall be unstintingly given to such members.

Section 9. Delegates. Each county shall be entitled to representation in the House of Delegates of this Association, one delegate for each fifty members or fraction thereof. Delegates shall be elected for terms of not less than two years and societies shall report such elections to the Executive Secretary of the Association in no event later than thirty days before the annual session.

Section 10. Duties of Component Society Secretaries. The secretary of each component medical society shall perform such duties as are usual and customary to his office. He shall maintain the official roll of membership for his society, shall collect dues and assessments, and shall make official reports as elsewhere prescribed in these By-Laws to the Association, transmitting dues in behalf of component society members. He shall conduct the official correspondence of his component medical society.

Chapter XIII

FISCAL YEAR

The fiscal year of the Association and its component county societies shall begin January 1 each year and end on December 31 following, but membership in the state Association shall not lapse until April 1 of that year.

Chapter XIV

AMENDMENTS

These By-Laws may be amended at any annual session by a majority vote of the delegates present at that session, after the amendment has laid upon the table for one day.

Chapter XV

REPEALING AUTHORITY

Upon adoption of these By-Laws, all previous By-Laws, motions of record, mandates, policies, rules and regulations in conflict therewith are hereby repealed, except that officers elected to serve in the Association and its component societies shall continue their incumbency until the completion of their previously prescribed terms and their successors elected under the current By-Laws.

Curtis Caine, Jackson, has been named chairman of a committee to aid in the development of airports over the state. The committee was appointed by the State Chamber of Commerce Committee on Community Development. The group is to issue information to local organizations on aids available. William Raulston, Hattiesburg, is also a member of the committee.

J. T. Davis, Corinth, was among the featured speakers at the annual meeting of the West Tennessee Medical and Surgical Association at Dyersburg, Tenn. Dr. Davis's talk was entitled "Closure of Traumatic Wounds of the Hand." He delivered the same address before the section on surgery during MSMA's 93rd Annual Session.

Thomas W. Frazier, Crawford, was honored by 75 Crawford citizens with a party on his 75th birthday May 25.

Dr. J. C. Green, Tupelo general surgeon, participated on the program of the Annual Clinical Congress of the International College of Surgeons in Chicago and accepted the symbolic diploma for his group from Dr. Gershom Thompson, Mayo Clinic, president of the U. S. Section.

Raymond Grenfell has been installed as the new president of the Jackson Symphony Orchestra Association for the 1961-62 season.

Charles E. Guice has announced the opening of his offices in Hattiesburg for the practice of general and thoracic surgery. Dr. Guice has previously served as chief of surgery at a U. S. Air Force Hospital in France, practiced two years in Laurel, and is clinical instructor in surgery at the University of Mississippi School of Medicine. He is a diplomate of the American Board of Surgery.

James D. Hardy, Jackson, will direct a course in pre- and postoperative care for the 47th Annual Congress of the American College of Surgeons which will meet in Chicago, Oct. 2-6. Dr. Hardy will direct one of the nine postgraduate courses at the meeting which is expected to attract more than 11,000 surgeons and physicians from all over the United States, Canada, and many foreign counties.

D. L. Hollis was named a director of the Biloxi Lions Club at a recent meeting of the group. He was also awarded a plaque of appreciation for his contribution to the organization.

Samuel O. Massey has been named president of the Picayune Lions Club. Dr. J. Ira Woodward was named a director of the organization.

L. L. McDougal, Tupelo, has been appointed by Governor Ross R. Barnett to the Cerebral Palsy Hospital School Board to take the place of John M. Ford of Baldwyn. Dr. McDougal is a member of the American Board of Pediatrics and has been chairman of the Cerebral Palsy Unit at Tupelo for five years.

Barry P. McIntosh, Hernando, has been elected president of the DeSoto County Chapter of the University of Mississippi Alumni Association.

M. B. Moore, Columbia, has been appointed a director of the Marion County General Hospital. He fills the vacancy on the Board of Trustees caused by the death of Dr. George S. Daly.

H. C. Ricks, Jr., Jackson, has received a National Foundation Certificate of Appreciation for five years of service on the Medical Advisory Committee of the Hinds County Chapter. The award was made at a recent chapter meeting by Dr. A. L. Gray, state health officer and State March of Dimes Chairman. Dr. Ricks, who is retiring as chairman of the chapter's Medical Advisory Committee, will be succeeded by Noel C. Womack, Jr. of Jackson.

Van Temple, Hattiesburg, GOP national committeeman from Mississippi, attended a Republican fund raising dinner in Washington June 1. Former President Dwight D. Eisenhower was the principal speaker. Other important GOP leaders attending were Gov. Nelson A. Rockefeller of New York, former vice president Richard M. Nixon, and Sen. Barry Goldwater of Arizona.

James Grant Thompson, Jackson, has announced the association of Louis J. Wise, Jr. in the practice of dermatology.

N. W. Todd was named one of seven new directors of the Newton Chamber of Commerce in recent elections.

Andrew Monroe Wynne, Merigold, was honored by the Merigold Methodist Church on June 4 for his years of service to the community. Dr. Wynne was graduated from the University of Tennessee Medical School in 1904. He has been practicing in Merigold since July 1908.

State Morbidity Reported Through May 19

The Mississippi State Board of Health reports the following occurrence of morbidity for 1961 through the 20th week of the year, ending May 19. Case totals reported are shown opposite the disease condition.

Tuberculosis, pul.	281
Tuberculosis, O.F.	16
Gas Gangrene	2
Salmonella inf.	3
Brucellosis	4
Dysentery, amebic	8
Dysentery, bacillary	15
Septicemia, NOS	1
Infection, staph.	6
Diphtheria	2
Infection, meningococcal	
Meningitis	9
Meningococcemia	3
Tularemia	8
Tetanus	1
Poliomyelitis (P)	1
Infection, encephalitis	10
Infection, mononucleosis	46
Generalized vaccinia	1
Toxoplasmosis	3
Puerperal sepsis	2
Diarrhea of newborn	3
Hepatitis, inf.	751
Helminthic inf.	
Hookworm	569
Ascariasis	122
Strongyloides	5
Histoplasmosis	15
Meningitis, O.F.	36
Infection, strep.	
Scarlet fever	116
Strep Throat	968
Infection, strep., O.F.	2
Pertussis	19
Measles	939
Chickenpox	642
Mumps	425
Influenza	408
Chancroid	16
Gonorrhea	2,536
Syphilis	
Early	125
Late	107

NEW MEMBERS

ANDERSON, ANSEL GLEN, JR., Whitfield. Born Natchez, Miss., Sept. 16, 1929; M.D., University of Tennessee School of Medicine, Memphis, 1956; interned Columbia Hospital of Richland County, Columbia, S. C.; U. S. Army, two years; elected April 4, 1961, by Central Medical Society.

MARTIN, CHARLES HENRY, Whitfield. Born Kokomo, Miss., May 5, 1931; M.D., University of Mississippi School of Medicine, Jackson, 1957; interned University Medical Center, Jackson, Miss.; elected April 4, 1961, by Central Medical Society.

MITCHELL, CHARLES FRANKLIN, Brandon. Born Philadelphia, Pa., May 23, 1925; M.D., University of Mississippi School of Medicine, Jackson, 1957; interned Mobile County Hospital, Mobile, Ala.; U. S. Navy, two years; elected March 7, 1961, by Central Medical Society.

AUXILIARY

Mrs. Nichols Named President Of Washington Auxiliary

Mrs. Carl Nichols of Leland was named president of the Washington County Medical Auxiliary at the organization's annual spring luncheon May 25.

Mrs. Ben Hand of Greenville will serve as vice president and Mrs. T. Y. Williford of Greenville as secretary.

Mrs. Robert Cunningham of Greenville was elected treasurer.

Mrs. Kellum Heads West Medical Auxiliary

Mrs. Herman Kellum was named to head the West Mississippi Medical Auxiliary during the group's May meeting. Mrs. Joseph Moore was elected president-elect.

Other officers include Mrs. Tom Dominick, first vice-president; Mrs. B. B. Martin, Sr., second vice president; Mrs. M. V. Dardin, secretary; Mrs. S. I. Feurst, treasurer, and Mrs. A. Street and Mrs. Sidney Johnston, historians.

MSMA-Robins Initiate Community Service Award

A new annual award for outstanding accomplishment in community service by a Mississippi physician will be initiated in 1962. This was the joint announcement of Dr. Lawrence W. Long, MSMA president, and Dr. H. H. McClanahan, Jr., chairman of the Board of Trustees, who said that ". . . the award is a joint project of the association and the A. H. Robins Company, Richmond, Va., long-established and respected manufacturer of ethical pharmaceuticals."



The recipient each year will be a member of the association who has been nominated by his component medical society, Drs. Long and McClanahan continued, each local society having one nomination invitation each year. From among a maximum of 16 possible nominees, the final selection will be made in sufficient time to present the award at the annual session.

Criteria for the award program were set by the Board during the 93rd Annual Session, Dr. McClanahan said. Each nominee must have been a member of the association in good standing both at the time the outstanding community service was rendered and when the presentation is actually made. Services recognized must be apart from purely professional achievement, such as contributions in scientific research, development of new and useful medical and surgical technics, and attainment of prominence in professional endeavor, since, as the Board stated, ". . . suitable awards in these connections already exist."

Services recognized must have benefited local or state communities in a civic, cultural, or general economic sense and should have been performed voluntarily. Service need not, however, be limited to a single achievement, the Board added, since many outstanding citizens contribute to community betterment through a series of services.

Dr. Long said that nominations would be invited from component medical societies during the summer or early fall this year. Societies will be asked to submit nominations in letter form to permit the widest possible latitude in stating the proposed awardee's qualifications.

Officials of the Robins organization, in making the award available, said that ". . . the doctor's part in community affairs is a very worthwhile means of pointing out that the doctor is not only the spearhead of the health team in his area but is also a contributing member to community service activities."

The award plaque is a hand rubbed mahogany wall mount upon which is fixed a sculptured medallion over a separate engraving plate. The theme is carried out in *bas* relief by the display of the Aesculapian staff to which a laurel wreath has been added over a symbolic urban-rural-industrial background.

Dr. Marston to Assume UMC Director-Dean Post

Dr. Robert Q. Marston will become director of the University of Mississippi Medical Center on July 1, 1961. The 38-year-old Virginian will also serve as dean of the medical school.

The new dean and director has been assistant dean in charge of student affairs at the Medical College of Virginia at Richmond where he was also an associate professor of medicine. His career includes two years as a Rhodes Scholar and five as a Markle Scholar.

Dr. Marston received his M.D. degree from the Medical College of Virginia in 1947. He earned his B.Sc. at Oxford as a Rhodes Scholar.

He interned at Johns Hopkins and took additional training at Vanderbilt and at the Medical College of Virginia. He served two years with the National Institute of Health as a member of the armed service special weapons project.

Dr. Marston joined the Medical College of Virginia faculty in 1954 as an assistant professor of medicine. He also taught at the University of Minnesota as a Markle Scholar, serving as an assistant professor of bacteriology and immunology.

Chancellor J. D. Williams announced the appointment of Dr. Marston to the top Medical Center post in February following his approval by the Board of Trustees of the Institutions of Higher

Learning. The new University official succeeds Dr. David S. Pankratz who resigned in February in anticipation of mandatory retirement.

Nuclear Scientist Speaks At UMC'S Commencement

A nuclear scientist was the featured speaker at the fifth commencement for the University of Mississippi School of Medicine June 11.

Dr. Marshall Brucer, head of the medical division at Oak Ridge Institute of Nuclear Studies, addressed candidates for degrees in the ceremony at First Baptist Church of Jackson.

Fifty-four medical students were candidates for M.D. degrees. The largest number of students in the history of the School of Nursing—22 in all—received Bachelor of Science degrees. One Ph.D. in physiology was awarded.

Degrees were awarded by Chancellor J. D. Williams. Dr. D. S. Pankratz, former dean, presented the candidates for the School of Medicine, Dean Christine Oglevee presented the candidates for the School of Nursing, and Assistant Dean Thomas J. Brooks presented the candidate for the graduate studies committee.

The all-day commencement festivities began with a breakfast at the Heidelberg Hotel where Medical Center alumni honored graduates and their families. The guest speaker was Dr. Lamar Bailey of Kosciusko, president of the Ole Miss Medical Alumni.

The baccalaureate sermon was preached by Dr. W. B. Selah during the regular morning worship service at Galloway Memorial Methodist Church. Attending in a group, the faculty and graduating students wore full academic regalia.

Commencement participants were entertained at the chancellor's noon luncheon in the Medical Center. Chancellor and Mrs. Williams honored candidates for degrees and their families immediately following the luncheon at a reception in the School of Medicine foyer.

Dr. J. P. Culpepper, III Receives Cancer Fellowship

The Alton Ochsner Medical Foundation of New Orleans has announced the appointment of Dr. John P. Culpepper, III of Hattiesburg as the Foundation's first American Cancer Society Clinical Fellow in Surgery.

The appointment followed receipt by the Foundation of an American Cancer Society grant for special graduate training in cancer treatment and research to begin July 1. Dr. Culpepper, currently a Foundation Fellow (resident) in General Surgery, was designated for this honor fellowship.

During the year, he will receive special training at Ochsner Foundation Hospital in chemical and surgical treatment of all stages of malignant disease, including study of operative methods for both primary and recurrent cancer.

His work in chemotherapy will be directed by Dr. Albert Segaloff, head of the Foundation's department of endocrine research. Dr. Culpepper will participate in the therapeutic evaluation of various new chemical agents, as well as other aspects of the foundation's cancer research program.

Son of Dr. and Mrs. J. P. Culpepper, Jr. of Hattiesburg, he attended the University of Mississippi and Tulane University, receiving his M.D. degree from Tulane in 1958. Following internship at Charity Hospital there, he began specialty training at Ochsner Foundation in July 1959.

He is married to the former Virginia Harris of San Antonio.

Dr. Culpepper will complete his training at Foundation in July 1963.

Blood Bank Workshop Meets in Jackson May 31



Panel members at the May 31 Blood Bank Workshop talk over their part in the program. From left to right are Dr. R. M. Hartwell of New Orleans, past president, American Association of Blood Banks; W. Quinn Jordan of Scottsdale, Ariz., executive director of the Southwest Blood Banks; Dr. Kenneth Heard of Jackson, director, department of pathology, Mississippi Baptist Hospital; Dr. Catherine Goetz of Jackson, pathologist, University Medical Center, and Dr. Charles Mitchell of Meridian, pathologist, Rush Memorial Hospital. The conference, which met in Jackson, considered hospital administrative aspects of blood and blood banking.

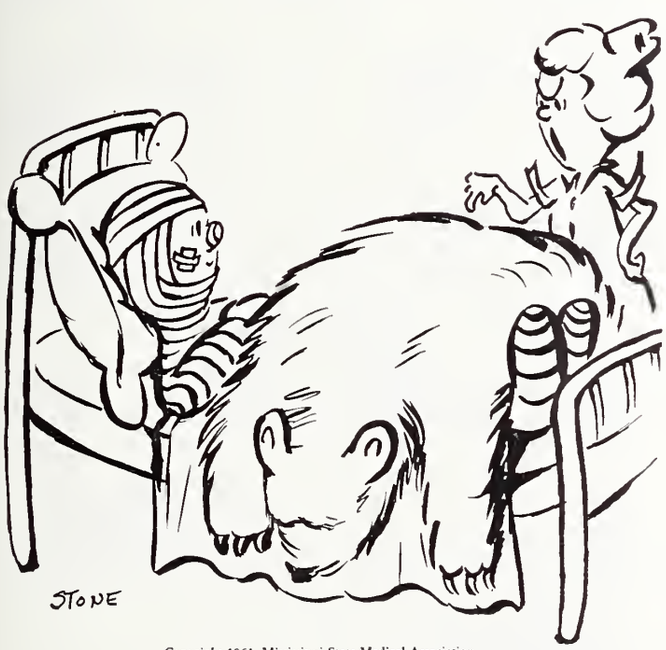
State Student Wins Summer Job at Institute of Pathology

Charles T. Womack, III, 17-year-old junior at Greenwood High School, Greenwood, Miss., was named winner of a summer job at the Armed Forces Institute of Pathology in Washington, D. C., and $300 for travel expenses for the best exhibit related to pathology and medical technology at the National Science Fair in Kansas City May 10-13.

His exhibit, titled "Effects of Splenic Extracts on Sarcoma in Two Animal Species," was the first citation given a student by the national pathologist and medical technologist societies. The animals used in his research were mice and chickens; the extract was from spleens of calves; the effects varied from increased growth of cancer when certain doses of extracts were injected to virtual disappearance of cancers with other dosages.

The winner, who was also awarded first prize in Mississippi's Science Fair, is the son of Mr. and Mrs. Charles Womack, Jr., 307 E. Munroe, Greenwood.

Summer employment at the Armed Forces Institute of Pathology is a coveted opportunity because of the Institute's unparalleled research facilities. Colonel Frank M. Townsend, USAF, MC, the director, AFIP, stated: "As the national winner, Charles will assist in actual programs within the Institute's three-fold mission of consultation, education, and research in pathology. This will afford him an outstanding study opportunity."



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"We realize you fought hard to get him, but it's been three days now."

Second prize for a pathology-medical technology exhibit at the national fair went to Deborah Chase, 15, a sophomore at Bronx High School of Science and daughter of Mr. and Mrs. Allen Chase, New York City. Her exhibit covered "Inquiry into Bacterial Phage Stimulation of *Escherichia coli,*" and was awarded a certificate and $100 U. S. bond.

In addition to this award, Deborah has to her credit Grand Prize in this year's New York City Science Fair, first prize from the Future Scientists of America in her 9th grade, and first prize in the Bronx borough Science Fair in her 6th grade. Her ambition is to be a medical researcher and professor, and she seems well on her way.

Certificates of merit for commendable pathology-medical technology National Fair exhibits were given to Harvey Scribner, III, 18, New Albany, Ind., for his exhibit on "Effect of Radio Waves on Cancer," and to Sandra Hager, 17, daughter of Mr. and Mrs. John J. Hager, Milwaukee, Wis., for an exhibit on "Cancer Chemotherapy."

Judges for the awards were Dr. John R. Carter, department of pathology, University of Kansas Medical Center, Kansas City, representing research pathology; Miss Kathern Forest MT(ASCP), Wichita, representing medical technology; Dr. William J. Reals, Wichita-St. Joseph Hospital, Wichita, representing clinical pathology.

Exhibits were judged with names of the authors blacked out from the judges' view, and selection of two boys and two girls for the four pathology-medical technology awards was entirely coincidental.

Sponsors of the awards, in addition to the AFIP, were the American Society of Clinical Pathologists, American Society of Medical Technologists, and the College of American Pathologists.

Four State Physicians Named To O & O Society Posts

Dr. Carl E. Granberry of New Orleans was named president of the Louisiana-Mississippi Ophthalmological and Otolaryngological Society at the group's meeting May 12-13 in Biloxi.

Other new officers are Dr. Donald S. Hall, Vicksburg, president-elect; Dr. Edley H. Jones, Vicksburg, secretary-treasurer; Dr. Horace B. Dozier, New Orleans, Dr. Shelley Gaines, New Orleans, Dr. Stirling McNair, Jackson, and Dr. Earl Green, Hattiesburg, councilors.

The association voted to return to the coast April 13 and 14, 1962.

Booneville Doctors Receive Fifty Year Club Pins

Two Booneville physicians, Dr. Stanley Livingston Pharr and Dr. William Arthur Watson, received their Fifty Year Club pins and memberships on June 10.



Dr. Pharr

Dr. Pharr entered the Mississippi Medical College at Meridian in September 1907 and graduated from the Memphis Hospital Medical College in 1911. Between college terms he practiced in Marietta and passed state board examinations for Tennessee and Mississippi in 1910.

He entered general practice in Marietta and remained there until 1926 when he moved to Leighton, Ala., for one year. Then he went to Booneville where he has practiced ever since. Dr. Pharr is 79 years old.



Dr. Watson

Dr. Watson was graduated from the University of Tennessee in 1911, and then practiced in Prentiss County for 27 years. He moved to Gardendale, Ala., in 1938 where he remained for 20 years. He returned to Booneville three years ago. Dr. Watson is 81 years old.

Both Dr. Pharr and Dr. Watson are emeritus members of MSMA.

Dr. Long Speaks On Hospital Interrelationships

Dr. Lawrence W. Long of Jackson, MSMA president, addressed the June 7 meeting of the Mississippi Association of Hospital Governing Boards on the interrelationship of the doctor, the hospital trustee, and the hospital administrator.

Dr. Long told the group, "Each of us is acutely aware of the complexity of modern medical care. It costs money, time, men and machines to add years to human life. The individual as an isolated entity simply can't treat serious pathology apart from other members of the health team. We need each other as we have never needed any thing before."

"In Washington today," Dr. Long warned, "an administration sits in office with the avowed determination to socialize all health care services for all Americans. The vehicle of the moment is the aged. Let none be deluded as to the final goals and objectives of Walter Reuther, Wilbur Cohen, Abraham Ribicoff, or any other labor or administration official. We know where they stand, what they stand for, and what they intend to do."

Concluded Dr. Long, "Every doctor of medicine hopes most fervently that those of you in the hospital service field possess the same acute awareness of this danger as we believe we do. Let none be deluded or deceived: This is our fight together and if one of us goes, the others can number their days of survival accordingly."

Dr. A. V. Beacham of Magnolia served as president for the association during the fifth annual convention. Governor Ross R. Barnett gave the keynote address for the meeting which was held in the Hotel Heidelberg in Jackson.

Laryngological Association Names Dr. Jones a Fellow

Edley H. Jones, Vicksburg, was elected a fellow in the American Laryngological Association at the group's meeting May 21 in Lake Placid, N. Y.

The association, which was founded in 1878, limits its membership to 100 fellows, who are selected on a nationwide basis.

Dr. Jones has served as secretary of the Louisiana-Mississippi Ophthalmological and Otolaryngological Society for a number of years, and has held the position of speaker of the House and director of the Association of American Physicians and Surgeons. He was a charter member of the Mississippi Eye, Ear, Nose and Throat Association, serving as president in 1954-55.

He was a charter member of the International Association of Secretaries of Ophthalmological and Otolaryngological Societies and has served as director, president, and secretary-treasurer.

He has held the position of vice president of the southern section of the American Laryngological, Rhinological, and Otological Society, and is a member of the West Mississippi Medical Society, MSMA, AMA, the Southern Medical Association, and the American College of Surgeons.

Six Clinical Cardiology Sessions Set for Heart Meet

Six sessions on clinical cardiology will be included in the 34th annual Scientific Sessions of the American Heart Association, to be held Oct. 20-22 at the Americana Hotel, Bal Harbour, Miami Beach, Fla. A panel or symposium including related investigative work will be presented at each clinical session.

In addition, a total of 18 other scientific sessions will be held concurrently during the three-day program.

A tentative outline of the program follows:

Friday, Oct. 20: The sessions on clinical cardiology include an opening address by Dr. Oglesby Paul, AHA president; the Conner Memorial Lecture, by Dr. Clark H. Millikan, professor of neurology, Mayo Clinic; symposia on "Contribution of Phonocardiography to Auscultation," and on "Coronary Arteriography"; a lecture on "Biplane Angiography" by Dr. Herbert L. Abrams, assistant professor of radiology, Stanford Medical Center. Concurrent sessions are scheduled on arteriosclerosis, on biophysical methods in the study of circulation, and on high blood pressure research. A program for nurses is also scheduled concerning cardiovascular research as it relates to care of the cardiac patient.

Saturday, Oct. 21: The clinical sessions will include a panel on "Ventricular Arrhythmias"; a lecture on "Closed Chest Cardiac Resuscitation" by Dr. James R. Jude, Johns Hopkins Hospital; the Brown Memorial Lecture on "Physiology of the Peripheral Circulation," by Dr. Robert W. Wilkins, professor of medicine, Boston University School of Medicine; and a symposium on "Renal Failure." Simultaneous scientific sessions will be held in the fields of basic science, cardiovascular surgery, and on "Compensable Heart Disease, Strain and Trauma."

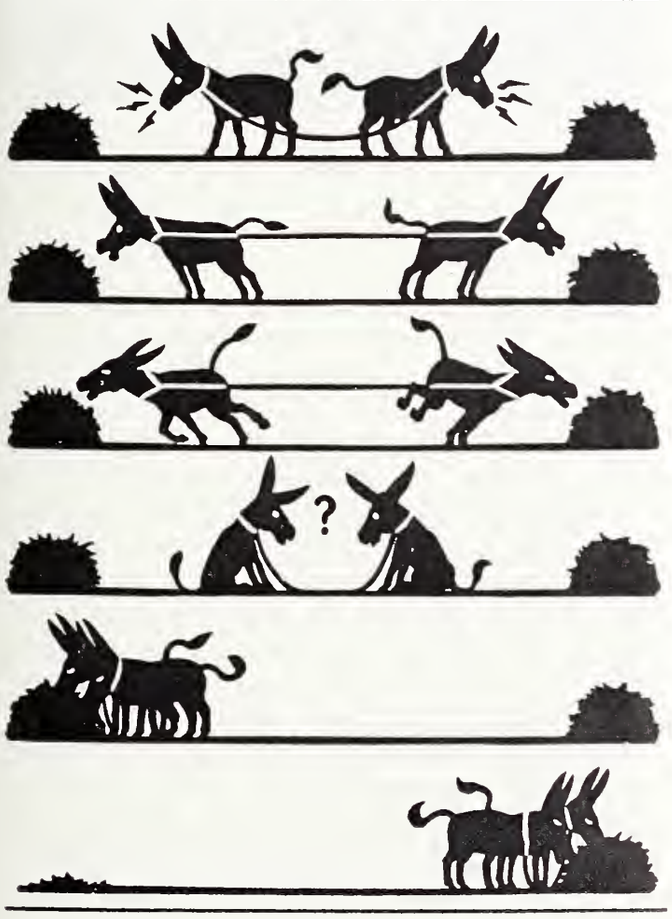
Scheduled for Saturday evening are "Cardiac Conferences," which will give physicians an opportunity to participate in small group discussions on timely cardiovascular problems.

Sunday, Oct. 22: Subjects for the clinical sessions include a symposium on "The Role of Hormones in Heart Failure"; panels on "Ventricular Hypertrophy and Bundle Branch Block" and "Newer Electrocardiographic Lead Systems"; and a lecture on "ECG Clues Suggesting Myocardial Infarction" by Dr. Junior A. Abildskov, assistant professor of medicine, State University of New York College of Medicine. Concurrent sessions will be held on rheumatic fever and congenital heart disease and on cardiovascular surgery. Cardiovascular films, with introduction and commentary by the author or other authority on the subject of each film, will be shown throughout Sunday.

As in previous years, scientific and industrial exhibits will be on display.

Registration forms, which include applications for hotel reservations, are available from the American Heart Association, 44 East 23rd Street, New York 10, N. Y.

Quadruped Quandary



Louisiana Group Names Dr. J. G. Thompson President

Dr. James Grant Thompson of Jackson has been elected president of the Louisiana Dermatological Association for 1961-62. This is the first time in its history that the association has elected an out-of-state physician to office.

A past president of MSMA, Dr. Thompson has been a member of the Louisiana organization for the past 10 years.

American Ob-Gyn Board Certifies Dr. Harrington

Dr. John N. Harrington, Columbus obstetrician and gynecologist, has been certified as a diplomate by the American Board of Obstetrics and Gynecology.

Dr. Harrington opened his practice in Columbus in 1956 after completing his residency at Tulane University School of Medicine. A native of Meridian, he has served for two terms with the U. S. Armed Forces, during World War II as a combat pilot and as a doctor in the Medical Corps after his internship at Walter Reed.

He is a member of the Doster and Columbus Hospital staffs and a consultant for the Columbus Air Force Base Hospital staff.

State March of Dimes Contributions Total $325,000

Contributions by Mississippians to the 1961 January New March of Dimes totaled $325,000 it was announced recently by Dr. A. L. Gray, state health officer and state chairman for the annual fund appeal.

In Hinds County, contributions amounted to $41,027.12, according to the report of J. Archie Bethune, county campaign director.

Owen Cooper, industrialist of Yazoo City, associate state chairman, joined Dr. Gray in expressing appreciation to all the volunteer workers and everyone who contributed to the drive.

State Jaycees Oppose Federal Care for Aging

The Mississippi State Junior Chamber of Commerce has gone on the record against federal medical care for the aging under Social Security.

At its state convention on the coast in April, the Jaycees resolved that ". . . this organization duly assembled hereby opposes the current health care of the aging program now pending before the Congress of the United States or any similar legislation that may be introduced."

The state group was to present a similar resolution before the United States Junior Chamber of Commerce at its annual convention June 21.

As grounds for its opposition, the state group said that, "such a government program, if enacted, would possibly be extended progressively to include comprehensive care for larger and larger segments of our population, and has in it the element of government determination of the price for hospital, nursing home, and medical service fees."

The resolution stated that "such legislation would restrict beneficiaries in their choice of hospitals and physicians." It also commented on the steady progress which has been made in extending and improving voluntary hospital insurance coverage of the aged under commercial programs.

Mount Olive Citizens Observe Dr. Calhoun Day May 27

Mount Olive citizens honored Dr. A. S. Calhoun on May 27 for his 50 years of service to the community. Friends and relatives from many parts of Mississippi and surrounding states came to be with the 77-year-old physician during the celebration.



Clifton Byrd and W. E. Blain present Dr. and Mrs. A. S. Calhoun with a television set, an anniversary gift from friends, during Dr. Calhoun Day in Mount Olive.

Dr. Calhoun Day began in the early afternoon and featured oral tributes by local and out-of-town associates. Dr. C. P. Crenshaw of Collins, president-elect of MSMA, presented the Fifty Year Club pin to Dr. Calhoun. Others on the program were Dr. A. L. Gray, state health officer; Dr. Charles Pruitt of the Magee General Hospital; Rev. G. R. Childress and Rev. E. L. Goff, Mount Olive pastors; Dr. J. E. Johnston and Dr. W. F. Stroud, Mount Olive physicians.

Dr. Calhoun opened his practice in Mount Olive in 1911 immediately following his graduation from Tulane University School of Medicine. He still answers calls in the four counties of Covington, Simpson, Smith, and Jefferson Davis.

New Pharmaceutical Firm Opens in Jackson

Amid Laboratories, Inc., a division of Mississippi Industries, Inc., is now in operation at 490 Woodrow Wilson Avenue in Jackson. The company will produce pharmaceuticals for distribution throughout this area. Future plans include the establishment of drug research as well as manufacturing facilities.

Officers of Amid Laboratories are Hugh White, chairman; Warren Hood, president; Thomas Mikell, executive vice-president and general manager; W. B. Ridgway, secretary-treasurer, and Dr. George Gillespie, medical director.

Directors, in addition to the five officers listed above, are Charles A. Carter, Jackson; George E. Cooper, Jackson; Dr. O. B. Crocker, Bruce; Dr. John D. Dyer, Houston; Dr. G. Swink Hicks, Natchez; and Dr. James V. Russell, Jackson.

Colorado Medical Sues Politician for Libel

Colorado physicians hit back at a Denver political figure who accused their state society of financing opposition to a referendum appearing on the recent municipal elections ballot. Attorneys for the Colorado State Medical Society filed suit for libel against George Kelly, Denver city council member, for statements alleged to have been made during a recent television show.

Society officials said that Mr. Kelly told TV viewers that CSMS was putting up $10,000 of its recent $50-per-member assessment to fight compulsory health care for the aged under Social Security to oppose the referendum. Dr. Cyrus W. Anderson, Denver, CSMA president, demanded a retraction, stating to the television station and Mr. Kelly that the society was in no way contributing to the local political campaign.

The councilman failed to respond, society officers said, and the suit for libel was filed within 48 hours.



Copyright 1961, Mississippi State Medical Association

"Just follow this diet and turn the little knob on the scales and you'll lose weight in no time at all."

State Doctors Take Active Part In Merit Community Program

A number of Mississippi physicians have taken an active part in the statewide Merit Community Program being sponsored through the Mississippi State Chamber of Commerce.

Francis J. Lundy of Hattiesburg, chairman of the program reports that "Doctors and their families have shown unusual interest in the program. This is greatly appreciated and shows that in addition to looking after the physical welfare of their patients, Mississippi doctors are interested in the over-all development of their communities."

According to Lundy, as of May 22, a total of 42 communities had completed scoring themselves in 10 basic categories of development—including health and sanitation. Another 60 centers are in various stages of grading themselves, preparatory to officially entering, says Lundy.

Physicians heading up general steering committees of the Merit Program in their communities include Drs. William R. Eure, Bay Springs; William E. Riecken, Jr., Kosciusko; Charles Moore, Philadelphia; Ben L. Crawford, Jr., Tylertown, and Spencer Barner, Columbus.

Other physicians who have worked with the program are Drs. G. W. Green, Benoit; C. D. Roberts, Brandon; H. L. Butters, Canton; C. W. Kelley, Clarksdale; Byron A. Mayo, Drew; Charles Pruitt, Jr., Magee; Walter Gunn, Quitman; C. M. Dorrough, Jr., Ruleville; J. V. Ferguson, West Point, and Everett H. Crawford, Tylertown.

American Ob-Gyn Board Schedules Examinations

The American Board of Obstetrics and Gynecology is now accepting applications for certification new and reopened, Part I, and requests for re-examination in Part II, according to Dr. Robert L. Faulkner, secretary.

Deadline date for receipt of applications is August 1, 1961. No applications will be accepted

after that date. Application fee of $35.00, photographs, and lists of hospital admissions must accompany all applications.

After July 1, 1962, the board will require a minimum of three years of approved progressive residency training to fulfill the requirements for admission to examination. After that date, training by preceptorship will no longer be acceptable.

A current bulletin containing all present requirements may be secured from Dr. Faulkner at 2105 Adelbert Road, Cleveland 6, Ohio.

McComb Physician Attends 'Second Graduation' at Tulane

Dr. Lucius W. Brock of McComb was one of 11 Tulane University Medical school graduates of the class of 1911 who gathered May 29 for a "second graduation" at the end of half a century.

Dr. Brock was born in Mount Hermon, La., the son of one country doctor and a nephew of another. He came to McComb from Mount Hermon in 1925. His two sons Ralph and Jim are also McComb physicians and his son Jep is a dentist.

Dr. Brock has been owner of the McComb Infirmary since 1935 and is active in church, civic, and community affairs, and politics. He is president of the Pike County Livestock Association, a former president of the McComb Rotary Club, a former member of the City Board and of the State Board of Health.

Last January he was a Mississippi delegate to the White House Conference on Aging in Washington.

Dr. Winkler Named Fellow In Academy of Pediatrics

Dr. Marion M. Winkler of Tupelo has been elected a Fellow in the American Academy of Pediatrics, according to Dr. E. H. Christopherson, executive director of the academy's international headquarters.

Dr. Winkler is one of over 200 Fellows voted into membership at the organization's scientific meeting in Washington, D. C., in May.

The academy's eligibility requirements include special training and experience, certification by the American Board of Pediatrics, high ethical and professional standing, clinical experience, and productivity in pediatric activities.

Medicolegal Home Course Offered Doctors

The American Medical Association has teamed with the University of Chicago to offer physicians a home study course in legal problems in the practice of medicine. AMA's Board of Trustees, in announcing the project, said that ". . . . this course (is) a means of providing the physician with an opportunity to acquire some knowledge of the principles and operation of American law as well as the interrelationships of law and medicine."

Geared exclusively for the busy physician, the course will interpret the law as it affects day-to-day medical practice problems having legal overtones. Statutes and court decisions affecting practice environments, regulatory laws, roles of legislatures and administrative agencies, and the work of courts and attorneys are included.

Tuition for the course is $35 and texts must be purchased by enrollees. Completed assignments will be mailed by physician-students to the university's home study department for evaluation and comment. Although the course must be completed in one calendar year, doctors may submit individual assignments at their respective conveniences. AMA and university officials say the course is suited for group study.

Dr. Hall Named President Of State EENT Association

Dr. Donald S. Hall of Vicksburg has been named president of the EENT Association for 1961-62.

Other officers are Dr. Joseph B. Rogers of Oxford, president-elect, and Dr. Samuel B. Johnson of Jackson, secretary.

New Orleans Assembly Announces 1962 Meeting

The 25th annual meeting of the New Orleans Graduate Medical Assembly will be held March 12-15, 1962, according to Dr. M. D. Paine, Jr., secretary of the assembly.

Headquarters for the meeting will be the Roosevelt Hotel. Further information may be secured from the organization's offices at 1430 Tulane Avenue, Room 105, New Orleans 12, La.

Top officers for this year are Dr. Barrett Kennedy, president; Dr. Ralph M. Hartwell, president-elect; Dr. Samuel R. Staggers, treasurer; and Dr. Walter F. Becker, director of program.

Ob-Gyn Group Marks 10th Anniversary in 1961

The American College of Obstetricians and Gynecologists marks its 10th anniversary this year with milestones of progress in many of its activities.

The 10th Anniversary Clinical Meeting April 20-28, 1961, in Bal Harbour, Fla., was the biggest ever held with respect to attendance, size of program, and variety of activities. The combined attendance of 3,281 included 1,557 Fellows, 518 guest physicians, 821 wives and 385 industrial exhibitors.

International in scope, the meeting registered 57 Latin American physicians from 16 Latin American countries, including Mexico. Others came from Sweden, New Zealand, Australia, Korea, and 19 from Canada (whose physicians are eligible to be Fellows of ACOG).

Stressing the internationalism was a speech by Virgil T. De Vault, M.D., medical director of the Foreign Service and Department of State, Washington, D. C., on "Medical Cooperation in the Western Hemisphere." He pointed out that many Latin Americans are studying in the United States —738 medical science students in our universities and nearly 1,800 interns or residents in our hospitals and clinics. He added that similarly, large numbers of North Americans are going to Latin America under the auspices of governments, foundations, and private organizations.

Dr. De Vault continued, "We now have a new program that opens up vast new horizons for work in health and sanitation in Latin America. This is the Act of Bogota, signed only a few months ago in Bogota, Colombia, by representatives of all the American republics except Cuba and the Dominican Republic. Among its many aims to ensure a greater measure of social justice in Latin America are steps to be taken for the improvement of public health, calling for close cooperation designed to accomplish many goals."

President John F. Kennedy joined Dr. De Vault in expressing appreciation for the work the College is doing via a telegram from Washington, D. C.

In his Presidential address, Dr. C. Paul Hodgkinson of Detroit, Mich., reemphasized the obligation of the College in sponsoring continuing education of practicing physicians, from its original statement of purpose on through its explosive 10-year growth.

Dr. Hodgkinson pointed out that the American Academy of General Practice has invited the College to participate in planning postgraduate education for generalists. The American Medical Association has asked the ACOG to help form a coordinating agency for continuing medical education.

The College voted to sponsor a series of Conferences on Obstetric, Gynecologic, and Neonatal Nursing at district levels, similar to several meetings which proved extremely popular last year among the nurses.

Dates and locations for the 1961 meetings are scheduled as follows:

Sept. 13-14—Kansas City, Kan.
Sept. 28-30—Atlanta, Ga.
Oct. 10-12—Pittsburgh, Pa.
Oct. 26-27—Chicago, Ill.
Nov. 16-18—Louisville, Ky.

The College approved a modest year-round information program of news releases, booklets, and related services, headed by Mrs. Ruth H. Sutton, Chicago, formerly of the American Medical Association.

Official College agreement of their pronunciation will begin the word "gynecologists" with the first syllable as in "jin."

An amendment was proposed and read for the first time, which will be voted on next April (1962). It would provide that among the requirements for becoming a Fellow would be one of certification by the American Board of Obstetrics and Gynecology, of which ACOG is one of the four sponsors.

Nicholson J. Eastman, M.D., Baltimore, Md., was installed the organization's 11th president.

Edward C. Hughes, M.D., of Syracuse, N. Y., was chosen president-elect to take office as president of the College in April 1962. Other new officers elected were first vice-president, Frank R. Lock, M.D., Winston-Salem, N. C., and second vice-president, Hermann S. Rhu, M.D., of Tucson, Ariz.

Officers re-elected include the treasurer, Axel N. Arneson, M.D., St. Louis, Mo.; secretary, Craig W. Muckle, M.D., Landsdowne, Pa.; and assistant secretary, Sprague H. Gardiner, M.D., Indianapolis, Ind.

Two associate editors were selected to help Dr. Ralph A. Reis, Chicago, Ill., as editor of the College's official journal, *Obstetrics & Gynecology*. Ralph Benson, M.D., Portland, Ore., and J. Robert Willson, M.D., Philadelphia, Pa., will both start work on Jan. 1, 1962.

The College executive director is Donald F. Richardson and the medical director is Robert A. Kimbrough, M.D., both of the Chicago headquarters office.

Dr. Karl A. Botten and Dr. Michael Newton,

of the University of Mississippi Medical Center, presented a scientific exhibit entitled "Cytology and Colposcopy" during the College's Tenth Anniversary Meeting. The Mississippi exhibit was awarded honorable mention.

The 1962 annual meeting of the College will be held in Chicago, the 1963 meeting in New York City, and the 1964 meeting again in Bal Harbour, Fla.

This fall's schedule of 1961 district meetings follows:

District I—Oct. 5-7, Boston, Mass.
District II—Oct. 12-14, Rochester, N. Y.
District III—Oct. 13-14, Pittsburgh, Pa.
District IV—Sept. 28-30, Atlanta, Ga.
District V—Oct. 19-21, Louisville, Ky.
District VI—Nov. 9-11, Fargo, No. Dak.
District VII—Sept. 15-16, Kansas City, Kan.
District VIII—Oct. 1-4, Berkeley, Calif.

Heart Association Announces Four 1961 Publications

Four new volumes bringing together materials from its scientific journals, *Circulation* and *Circulation Research,* are being published by the American Heart Association.

"Hypertension—Chemical and Hormonal Factors" ($2.50), Volume IX of the Proceedings of the Association's Council on High Blood Pressure Research, is a compilation of papers given by leading authorities in the field at the Council's Annual Meeting in Cleveland last November.

"Symposium on Coronary Heart Disease" ($2.50), No. 2 in the AHA monograph series, a compilation of articles originally published in *Circulation* from August 1960-January 1961. Authors include Drs. Paul D. White, Herrman L. Blumgart, Paul M. Zoll, J. Scott Butterworth, Edmund H. Reppert, Jr., Robert E. Olson, George S. Kurland, A. Stone Freedberg, Irving S. Wright, Anthony P. Fletcher, Sol Sherry, Howard B. Sprague, E. Cowles Andrus, Eugene Lepeschkin and Bruce Logue.

"Cardiovascular Abstracts I—1960" ($2.75), contains more than 700 abstracts of significant papers on cardiovascular subjects published in 86 scientific journals in the United States and abroad. It is edited by Dr. Stanford Wessler with a foreword by Dr. J. Scott Butterworth, president-elect of the American Heart Association.

The above three volumes are now available from the Distribution Department, American Heart Association, 44 East 23rd Street, New York 10, N. Y., or through the usual channels.

Scheduled for publication in August is a symposium, "The Myocardium—Its Biochemistry and Biophysics" ($2.50). It will include presentations given at a New York Heart Association event in December 1960 by Drs. Hugh E. Huxley, Don W. Fawcett, Johannes A. G. Rhodin, George E. Palade, Manuel F. Morales, Shizuo Watanabe, Richard J. Podolsky, Wilfried F. H. M. Mommaerts, Robert F. Furchgott, Charles F. Lyman, Irwin R. Konigsberg and Robert L. DeHaan. The symposium will also be published as a supplement to the August issue of *Circulation.*

June and Tonsils Bustin' Out All Over

It isn't only June that's bustin' out all over, it's also time for tonsils to have their seasonal fling.

The Health Insurance Institute reports that a survey of hospitalized persons shows that June is the month with the highest incidence of tonsillectomies, while the lowest incidence is in the summer months of July, August and September.

The survey also disclosed that only two tonsillectomies in 1,000 result in infection, that one out of 32 cases experiences excessive bleeding, and that only one death, of a 31-year-old man, was reported out of a total of nearly 3,000 tonsillectomies studied.

Tonsillectomy patients are usually between the ages of three and eight, and the average length of hospital stay for this operative procedure is 1.7 days.

More information on tonsillectomies was developed by the Society of Actuaries in an analysis of claims made under group surgical insurance.

Of nearly 35,000 claims paid for surgery on children, 30 per cent were for tonsillectomies. This type of surgery accounted for 25 per cent of the claims made on behalf of boys and 36 per cent of those for girls.

Stitches and the treatment of lacerations accounted for 20 per cent of the surgery on children, fractures for 12 per cent, appendectomies for five per cent, the removal and treatment of benign tumors for five per cent, and all other surgical procedures amounted to 28 per cent of the total.

That boys go in for rougher play than girls was borne out by the study. Stitches, lacerations and fractures accounted for 35 per cent of the surgery on boys, compared to 27 per cent on girls. However, 15 per cent of the surgery on girls was for appendectomies or the treatment of tumors, which accounted for eight per cent of the surgery on boys.

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ORIGINAL PAPERS

Mesenteric Vein Disease

JOHN D. REEVES, M.D., and C. C. WANG, M.D.
Gainesville, Florida
Boston, Massachusetts

Although mesenteric venous disease is often thought of in connection with mesenteric artery disease, the authors point out it is an entirely different problem. The vein involvement, they write, is usually a slowly developing problem of discomfort and swelling while the arterial disorder is usually a problem of acute pain and ischemia. The development of disease states due to the "chronic passive congestion" of venous thrombosis is much less dramatic and slower than those following the sudden ischemia of arterial occlusion, they point out, but the secondary inflammatory changes may be much more severe. In addition, venous thrombosis may be overlooked until it is too late for definitive surgery because of the lack of definite localizing pain and slowly developing inflammation and peritonitis. The authors discuss etiology, differential diagnosis, and treatment, and present five case histories.

The stages and patterns of mesenteric vascular disease may now be divided categorized in a systematic fashion which tends to clarify a large variety of clinical syndromes (see Table 1).

It has been shown[1, 2] that if one considers the logical pattern of events which might be assumed to occur with varying degrees of reduction of the arterial blood supply to the bowel, many patterns of disease not unlike those of cardiac or cerebral ischemia can indeed be found. However, one must keep in mind a major difference in the mesenteric arteries as opposed to coronary or cerebral arteries of similar calibre and stage of atheromatous disease. That major difference is in the fact that the end-organ supplied by the mesenteric arteries, the bowel, is not sterile. All manner of fauna and flora flourish within the lumen of the bowel. If the integrity of the bowel mucosa is disrupted, then bacteria have ready access to nonresistant submucosal tissues. Inflammation and all its sequelae then begin.

Mesenteric artery disease in its early stages may be manifested only by abdominal angina.[1, 2, 3, 4, 5] Further diminution in the blood supply can result in cellular anoxia to the extent that digestive processes are interfered with, and actual "malabsorption syndromes" may develop.[1, 2, 8] Beyond this stage of presumed gradual narrowing

From the Departments of Radiology, University of Florida College of Medicine, and the Massachusetts General Hospital, Boston.
Read before the Section on Medicine, 93rd Annual Session. Mississippi State Medical Association, Biloxi, May 9-11, 1961.

of mesenteric arteries and the resultant "mesenteric insufficiency" lie the complications of secondary inflammation.

SECONDARY INFLAMMATION

If narrowing or occlusion of a mesenteric artery or a branch thereof is in an anatomic position where collateral blood supply is insufficient to maintain mucosal integrity, secondary inflammation will supervene. Thus patterns indistinguishable from "regional enteritis" or "ulcerative colitis" begin.[1, 2, 7, 8] From examination of surgical and pathologic specimens it is frequently impossible to distinguish "regional enteritis" or ulcerative colitis" of vascular etiology from the so-called idiopathic ulcerative colitides, Cruhn's disease, and other disorders. To prove a vascular etiology, the possibility must be suspected and the vessels studied carefully by angiography, at surgery, or by detailed examination at postmortem. It may well be that more careful studies will shift many such "non-specific" entities into the realm of "specific" understandable diseases of known etiology and pathogenesis.

INFARCTION DEVELOPMENT

If there is no available collateral blood supply when a mesenteric artery, or a branch thereof, is occluded, then infarction results.[1, 2, 5, 6, 8, 9, 10, 11, 12, 13] If the infarcted area is small (this seems to happen occasionally, perhaps particularly in the terminal ileum), there may be simply localized thickening of the bowel wall resulting in a pseudotumor which may be identified on barium study or at surgical exploration.[1, 2] Some infarcts of the bowel, just as in the heart, lung, or brain, may heal with no significant residuum. However, if the entire circumference of the bowel wall is affected and secondary inflammation is severe, healing may be accompanied by narrowing or stenosis.[1, 2, 15] Just as with inflammatory narrowing elsewhere in hollow viscera (e.g., esophagitis, urethritis, or periureteritis), the narrowing will usually be fusiform in shape and need not be confused with annular carcinoma.

MASSIVE ARTERIAL OCCLUSION

The more subtle, early variations of mesenteric artery disease described above have not been widely recognized. But the dramatic sequence of events which occur with massive arterial occlusion[1, 2, 6, 10, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 23] are not easy to overlook. Abdominal pain, particularly if severe, and occurring in a patient with generalized atherosclerosis, other evidence of vascular disease, recent myocardial infarction, cardiac disease with endocardial vegetations, atrial fibrillation, postoperative cardiac surgery, polycythemia or other blood dyscrasias, should signal the suspicion of mesenteric artery occlusion. These patients will have a sudden onset of ileus, usually complete; this may be documented by periodic radiographs if desired. The mucosal ischemia of arterial occlusion soon leads to anoxic death of the cells and moderate mucosal edema. As the integrity of the bowel wall is compromised, a transudate develops and this leads to ascites. Unless shock and death supervene, inflammation begins and the transudate becomes an exudate leading to peritonitis. Nausea and vomiting may begin. Hemorrhage, often massive, will occur. The stool will be guaiac positive if not grossly bloody. Finally, gangrene of the bowel will lead to perforation, thence to death.

TREATMENT

This sequence of events in massive arterial occlusion is rapid, usually taking only a few hours at the very most. Recognized early, thrombo-endarterectomy may be all that is required.[1, 2, 8, 13, 14, 24, 25] Resection of infarcted or gangrenous bowel may be necessary and life-saving in the early stages.[1, 2, 14]

However, we should not forget that spontaneous recovery has occurred in some cases of complete occlusion of the superior or inferior mesenteric artery.[1, 2, 7, 11] Some of these who recover may get entirely well, or may be left with inadequate bowel function and malabsorption syndromes.

MESENTERIC VENOUS DISEASE

Mesenteric venous disease is often thought of in the same vein as mesenteric artery disease, but it is a vein of a different color entirely. Phlebothrombosis and thrombophlebitis of the mesenteric veins[1, 26] are the most subtle of the vascular lesions involving bowel. So subtle are these two lesions in their masquerade of other diseases that the patient often wears the mask of death before the diagnosis is evident.

Why this great subtlety? Can a rationale of the pathogenesis of this venous disease be developed? Consider the development of phlebothrombosis or thrombophlebitis in the leg as opposed to femoral artery occlusion. The vein involvement is usually a slowly developing problem of discomfort and swelling; the arterial disorder is usually a problem

of acute pain and ischemia. But again, most importantly, in the bowel we have the problem of bacterial contamination. Thus with occlusion of a mesenteric vein, blood is continually pumped in

THE STAGES OF MESENTERIC VASCULAR DISEASE

I.	Mesenteric INSUFFICIENCY	Abdominal Anginal Mucosal Ischemia & "Decompensation" Mal-Absorption Syndromes
II.	Secondary INFLAMMATION	"Regional Enteritis" "Ulcerative Colitis"
III.	Localized INFARCTION	Pseudo-Tumor Formation Healing without Residuum Healed with Fusiform Narrowing

IV.	MASSIVE ARTERIAL OCCLUSION	MESENTERIC VENOUS THROMBOSIS
	Sudden Ileus	Subtle Ileus
	ISCHEMIA	"CHRONIC PASSIVE CONGESTION"
	Mucosal Edema, moderate	Mucosal Edema, marked
	Transudate → Ascites	Transudate → Ascites
	(Inflammation)	INFLAMMATION
	Exudate → Peritonitis	Exudate → Peritonitis
	Hemorrhage, usually massive	Hemorrhage, slight to massive
	Gangrene; Perforation	Gangrene; Perforation
	(Usually Rapid: Hours)	(Often Slow: Days)

Table 1.

thru the arteries and a state of "chronic passive congestion" develops in the bowel. A subtle ileus develops, accompanied by abdominal discomfort but usually not severe pain in the early stages. Mucosal and bowel wall edema becomes marked, much greater than in arterial disease. Transudate leads to a marked ascites. Inflammation becomes a great problem in the markedly edematous, poorly oxygenated bowel wall. Fibrinous inflammatory exudate and peritonitis develop, usually rather gradually, depending in part, perhaps, on whether the original insult was phlebothrombosis or thrombophlebitis. As inflammation erodes capillaries, arterioles, and arteries, hemorrhage will result; this may be slight or massive. Gangrene and perforation of bowel eventually develop, followed by peritonitis and death. The whole sequence of events may take days to develop, as contrasted with hours for mesenteric artery occlusion. Predisposing factors for venous diseases are blood dyscrasias or postoperative abdominal surgery (perhaps particularly if for inflammatory disease; e.g., appendicitis).

VENOUS OCCLUSION

Mesenteric venous occlusion may result not uncommonly in skip areas of quite viable and perfectly normal bowel. Thus segmental resections and reanastomoses may be undertaken with a certain amount of confidence when venous occlusion is recognized. Only rarely will a case of venous mesenteric occlusion recover spontaneously. This is probably because inflammation is such a much greater factor in the markedly edematous and congested bowel of venous occlusion as compared with the varying degrees of arterial occlusion.

Following are brief case histories and radiologic findings in five cases of mesenteric venous disease.

CASE 1

This 49-year-old male was admitted to the hospital with a history of vague upper abdominal pain of four days' duration. While in the emergency room, he had a small, bright red bloody stool. After admission to the hospital he had several bloody stools. Repeated blood transfusions failed to bring the patient out of shock. Physical examination revealed a distended abdomen with diffuse upper abdominal tenderness and occasional high-pitched peristaltic rushes.

Plain film of the abdomen revealed a diffuse haziness indicating ascites. There were a few gas-filled loops of small bowel in the upper abdomen; the walls of the small bowel in the upper abdomen appeared thickened as though edematous.

An emergency gastrointestinal series found the

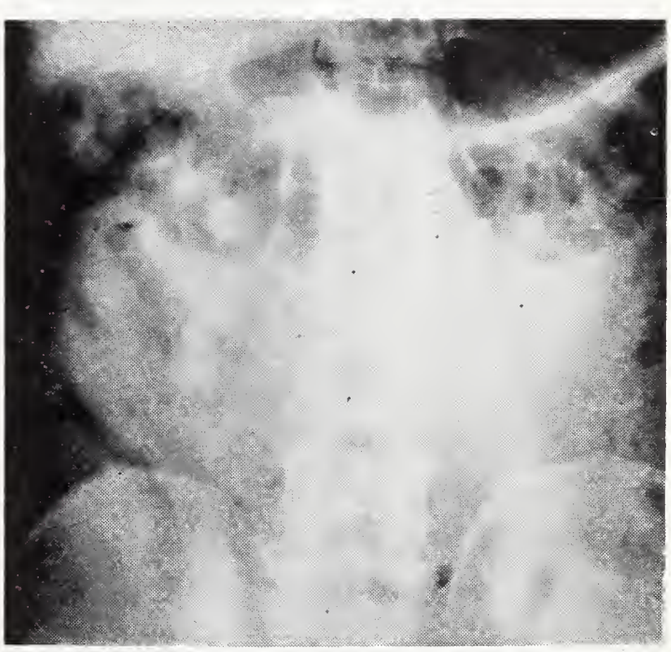


Figure 1. Case 1. Acute superior mesenteric vein thrombosis. Plain film of the abdomen shows peculiar gas-containing loops of small bowel in the right abdomen, apparently with thickened bowel walls and ascites. Reproduced by permission from Am. J. Roentgenol. 83:895, 1960.

stomach and duodenal bulb free of ulceration. Barium went through the pylorus into the duodenum and jejunum in an unusually rapid fashion, and the lumen of the upper small bowel was markedly increased in diameter. However, there was marked delay in passage of barium through the remainder of the small bowel. The mid-jejunum mucosa appeared edematous and the bowel wall thickened. Follow-up film two and a half hours later revealed that no barium had passed beyond the upper-jejunum.



Figure 2. Case 1. Barium meal outlines markedly edematous folds in slightly dilated jejunum. Note the air-filled loop of jejunum with thickened walls in the right upper quadrant. Reproduced by permission from Am. J. Roentgenol. 83:895, 1960.

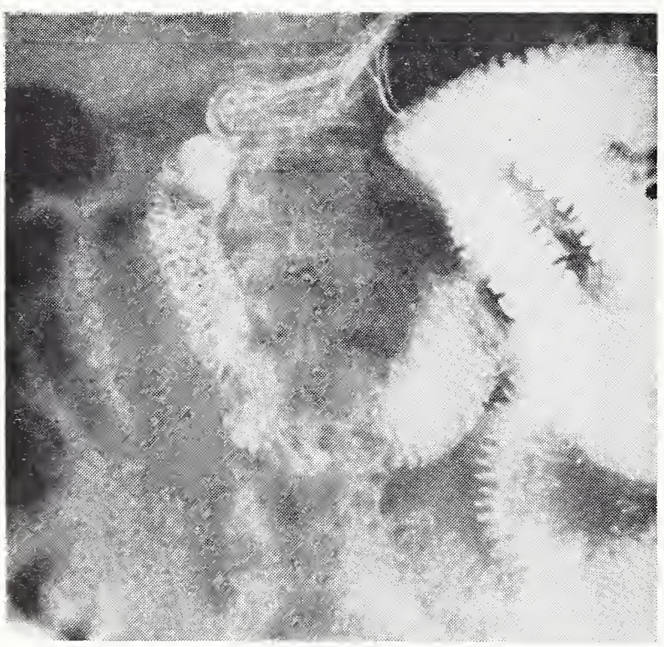


Figure 3. Case 1. Follow-up film two and one half hours after barium shows relative ileus and markedly thickened folds.

Operation showed superior mesenteric vein thrombosis with infarction of the entire small bowel and its mesentery. No resection was possible and the patient expired several hours postoperatively. Postmortem examination confirmed these findings and observations.

CASE 2

This 51-year-old male entered the hospital with abdominal pain of one week's duration. No nausea, vomiting, or fever was noted; however, the white blood count was 16,000. Intestinal peristalsis was absent on auscultation. While the patient was in the hospital, he began to bleed from the rectum and died 12 days after entry.

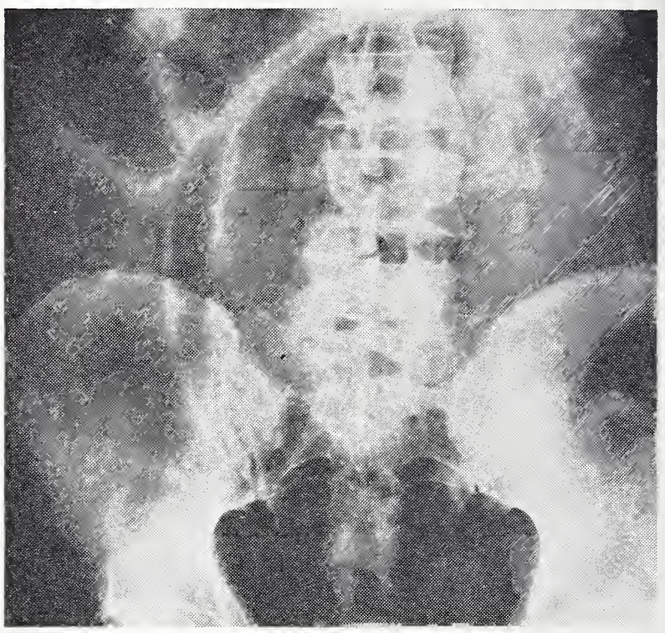


Figure 4. Case 2. Superior mesenteric vein thrombosis producing "ileitis" deformity of the small bowel. Plain film of the abdomen shows gas in the proximal colon and three loops of small bowel with thickened walls in the right abdomen. Reproduced by permission from Am. J. Roentgenol. 83:895, 1960.

Plain film of the abdomen shortly after entry showed the presence of gas in the proximal colon. There were three gas-filled loops of small bowel in the right mid-abdomen; these paralleled each other suggesting that there might have been some thickening of the bowel wall and perhaps adhesions.

Barium enema with reflux into the ileum demonstrated markedly narrowed loops of terminal ileum

with edematous folds. Ribbon-like narrowing and serration of the bowel wall simulated "regional ileitis."

At autopsy the small bowel was gangrenous with an inflammatory mass in the right lower quadrant. The gangrene and inflammatory change were the end-result of superior mesenteric vein thrombosis.



Figure 5. Case 2. Barium enema with reflux into the ileum shows markedly narrowed loops of terminal ileum with edematous folds. There is ribbon-like narrowing with superficial ulceration in portions of the ileum.

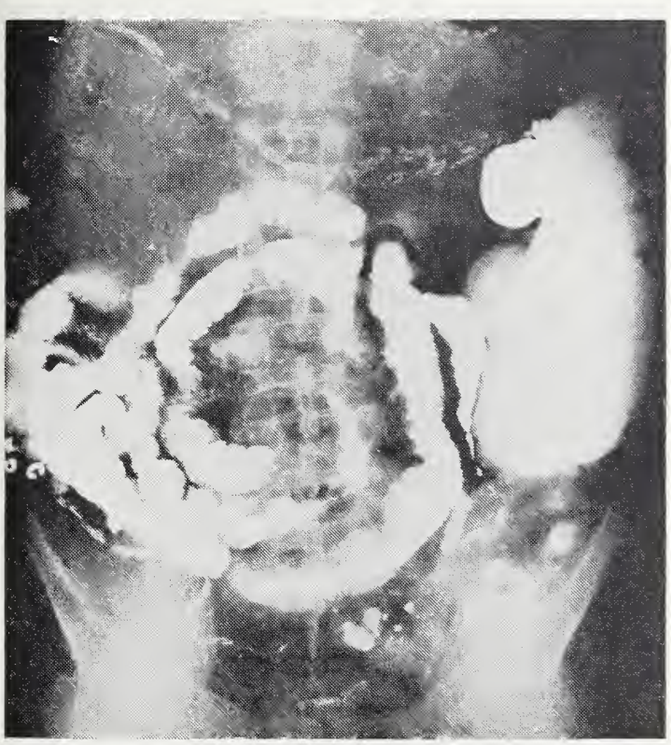


Figure 6. Case 2. After evacuation of barium enema there is relative stasis in the ileum, and the narrowed serrated "ileitis" changes are more apparent. Reproduced by permission from Am. J. Roentgenol. 83:895, 1960.

CASE 3

This 69-year-old male entered the hospital with 24 hours of steady, severe left abdominal pain just above the umbilicus, shifting slowly to the right. This was accompanied by nausea. Peristalsis was absent on admission. The abdomen was tympanitic, tender with slight spasm to the right of and below the umbilicus. White blood count was 16,800. Temperature was minimally elevated.

Plain film of the abdomen revealed dilated gas-

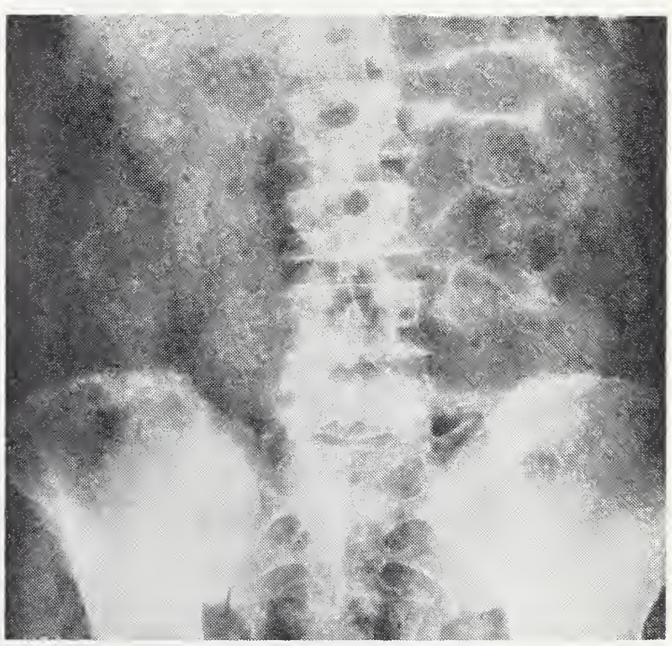


Figure 7. Case 3. Localized mesenteric vein thrombosis of the upper ileum, surgically resected. Plain film of the abdomen demonstrates fluid-filled loop of small bowel in the right upper quadrant and ileus proximal to this.

filled loops of small bowel in the left upper quadrant surrounded on the right by a single fluid-filled loop which showed no valvulae conniventes. Considerations at this time were internal hernia, small bowel volvulus, or localized mesenteric thrombosis.

At operation, the patient was found to have a fluid-filled loop of upper ileum 20 inches in length undergoing necrosis as a result of the localized venous thrombosis. Some gas-filled loops were present proximal to this, and the bowel distal to the thrombosed area was collapsed. A wedge of mesentery and nonviable bowel was resected. The

patient survived without incident and has had no subsequent evidence of mesenteric disease.

CASE 4

This 60-year-old male had a 14 year history of rheumatic heart disease, mitral stenosis, and atrial fibrillation. Five weeks previously he had had transient hemiplegia. Three days after admission he had amputation of the left auricular appendage and mitral valvulotomy with a slow postoperative response. Four days after this operation he developed a temperature and vomiting which gradually subsided; he was discharged 10 days later.

Three weeks after the mitral surgery, the patient was admitted with abdominal pain, dull, aching, and periumbilical distribution. Two days later he had some vomiting. Four days after this admission his abdominal pain increased and the vomiting was more pronounced. The patient remained afebrile. Vomiting gradually subsided, though nausea and anorexia continued.

Barium studies eight days after the second admission revealed edema of the small bowel with considerable narrowing of several segments, delay in passage of barium throughout the entire small bowel with specific delay in one or two loops of small bowel.



Figure 8. Case 4. Superior mesenteric vein thrombosis. Barium meal shows marked edema and irregularity of the mucosal pattern of the small bowel. Note the rather sharp demarcation between normal and abnormal bowel.



Figure 9. Case 4. Follow-up film four hours later demonstrates the greater extent of small bowel changes. Note particularly the segmental distribution and the variation and severity of "ileitis" changes in various segments.

The day following the barium study, surgical expiration was undertaken and multiple thromboses in the superior mesenteric veins were found. Resections of the bowel were not undertaken; yet the patient survived.

CASE 5

This 59-year-old male was admitted to the hospital for esophagectomy (for benign esophageal stricture). One week after the operation there was a sudden onset of abdominal distention associated with pain. Intestinal peristalsis continued. Stools were guaiac four plus. White blood count was 11,400.

Plain film of the abdomen at this time showed a large amount of gas in the small and large bowel without characteristic pattern.

Approximately one month after operation, the patient's condition worsened. Plain film of the abdomen at this time showed a marked dilatation of the small and large bowel to the region of the splenic flexure. The descending colon was contracted. Barium enema study, however, demonstrated no colonic obstruction and the descending colon was less dilated with the proximal colon.

The changes were considered quite compatible with superior mesenteric examination of this patient. This case is one of the few which fits the classical description of superior mesenteric vein (or artery) occlusion in which the colon is distended to the region of the splenic flexure. This



Figure 10. Case 5. Superior mesenteric vein occlusion simulating large bowel obstruction at the splenic flexure. Barium enema demonstrates no intraluminal lesion. Reproduced by permission from Am. J. Roentgenol. 83:895, 1960.

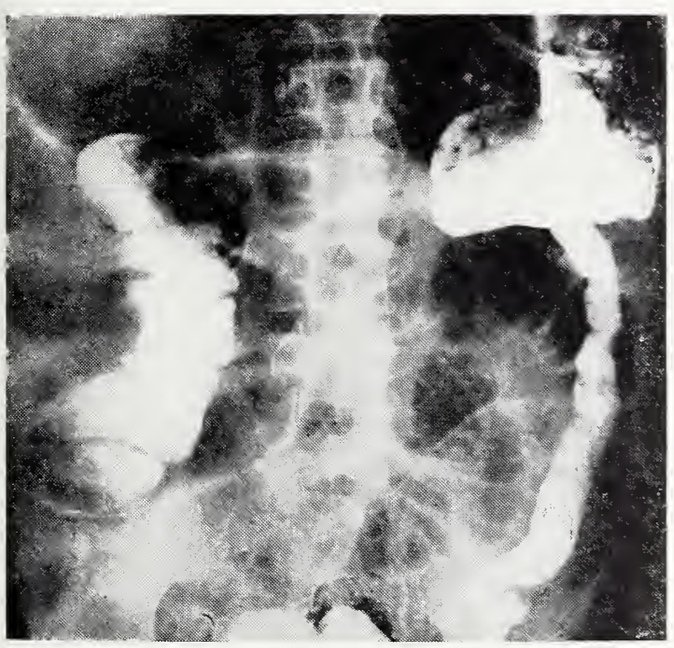


Figure 11. Case 5. Film taken three days later shows large and small bowel greatly distended by gas. Residual barium outlines a relatively normal descending colon. This degree of ileus in the large bowel is in itself most significant. Reproduced by permission from Am. J. Roentgenol. 83:895, 1960.

type of finding, although classically described in textbooks, has been notable for its rarity.

SUMMARY

While mesenteric artery disease has been recognized to present in more subtle forms of mesenteric insufficiency, complicated by secondary inflammation or localized infarction, it is most often recognized in the dramatic massive arterial occlusion. That a similar but different sequence of events may occur in mesenteric venous thrombosis has not been readily recognized.

Mesenteric venous phlebothrombosis or thrombophlebitis results in a much slower evolution of clinical events. The development of disease states due to the "chronic passive congestion" of venous thrombosis is much less dramatic and slower than those following the sudden ischemia of arterial occlusion. The secondary inflammatory changes, while they develop more slowly in venous mesenteric thrombosis, may be much more severe. Because of the lack of definite localizing pain, and slowly developing inflammation and peritonitis, venous thrombosis may be overlooked before it is too late for definitive surgery. Venous mesenteric thrombosis may occasionally leave normal areas of bowel interspersed with thrombosed areas, and segmental resection may be feasible.

Any patient, particularly in an older age group, who has predisposing blood dyscrasia or who has had recent surgery, particularly abdominal and this particularly for inflammatory disease, who develops vague abdominal pain, slight fever or elevation of white blood count, and guaiac positive stools should be considered to have mesenteric venous thrombosis until this entity is ruled out.

★★★

J. Hillis Miller Health Center (Dr. Reeves)

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MARITAL HORMONEY

"Dear Doctor," wrote the patient's wife. "My husband used to be a contented, happy family man, an ideal mate and father. Since consulting you, he has become restless, flirtatious, critical of my housekeeping and the children, an ogre about bills, vain, arrogant, and I suspect, a woman-chaser. It is my belief that you have been giving him hormone shots which have entirely changed his personality. My next appeal will be to the medical society." "Dear Mrs. Jones," came the reply. "In response to your letter, I have not been giving your husband shots of any kind. I have had him fitted with contact lenses."

—Jimmy Ward, Editor
The Jackson Daily News

Case Report VI of the Maternal Mortality Study: Abortion and Its Complications

F. C. MASSENGILL, M.D.
Brookhaven, Mississippi

Case Report VI from MSMA's Committee on Maternal and Child Care concerns a completely documented maternal death due to septicemia following infected abortion with subsequent renal failure. The Committee considers the data and presents its findings in this report.

THE FOLLOWING CASE REPORT, presented by the Committee on Maternal and Child Care, represents death following abortion and its complications.

CASE NO. 212-14745-60

A 25-year-old white female, gravida 3, para 2, first consulted a physician because of generally "feeling bad" and fever. She was given tetracycline and a diagnosis of influenza was made. She did not return to this physician but went to see another seven days later, at which time she was suffering from vomiting and diarrhea.

Physical findings revealed puffy eyelids, a heart rate of 104 per minute with questionable gallop rhythm, lungs clear to auscultation and percussion. Abdominal examination revealed tenderness with mild distention. Pelvic examination showed products of conception in the vagina and uterine and cul-de-sac tenderness. She was admitted to a local hospital on the same day.

Laboratory data on admission showed her hematocrit to be 20 per cent, white blood count 15,000, and urinalysis showed specific gravity 1.017, albumin 3 plus, no sugar or acetone and 2 to 3 red blood cells per high power field. Her blood urea nitrogen was 62 mg. per cent. A chest x-ray and flat plate x-ray of the abdomen were negative. Tissue obtained from the uterus with a Novak curette revealed necrotic decidual tissue. A smear of this showed gram positive bacilli with spores.

The patient was treated with high doses of penicillin and streptomycin and tetracycline, 100 mg., was given intramuscularly every six hours. She also received 13,500 units of tetanus antitoxin and 36,000 units of gas gangrene antitoxin. Two thousand cc. of blood was given on the day of admission. A repeat BUN three days later was 52 mg. per cent and the urine output during the first three days was approximately 300 cc. On the fourth day the output rose to 650 cc. and on the fifth day to 1,010 cc. Abdominal distention became more severe and on the fourth hospital day a Levin tube was inserted. Oxygen was given for dyspnea, but no wheezes or rales were heard. On the fifth hospital day the patient was referred to another hospital.

At this time physical examination showed her blood pressure to be 140/90, temperature 102, and respirations 30. She was noted to be a well-developed and nourished woman with considerable respiratory difficulty and was semicomatose. Blood was noted in the mouth. There was wheezing and bubbling through the lungs. A gallop rhythm was detected. The abdomen was slightly distended with hypoactive bowel sounds. Pelvic examination revealed a blue, slightly dilated cervix from which a small amount of nonfoul bloody mucus exuded. The uterus was small and no adnexal masses were noted. Only mild tenderness was present.

Laboratory data showed her hemoglobin to be 14.6 gm., hematocrit 46 per cent, nonprotein

General Practice member, Committee on Maternal and Child Care.

nitrogen 179 mg. per cent, blood sugar 154 mg. per cent, CO_2 14, chloride 101, potassium 7, sodium 128. Urinalysis revealed a pH of 4.7, specific gravity 1.010, 4 plus albumin, no glucose, white cells 0 to 1, red cells too numerous to count per high power field, and no bacteria. A gram positive rod was seen on a smear of her blood but culture failed to grow any organisms. Urine culture was negative. Culture of material from the cervix revealed only two colonies of coagulase negative staphylococcus. Chest x-ray revealed an extensive patchy infiltration throughout both lung fields. X-ray of the abdomen was negative.

The admitting diagnosis was: (1) septicemia, (2) abortion, (3) pulmonary edema, and (4) acute renal failure. The patient was treated for acute pulmonary edema and was given antibiotics. Dialysis by means of the artificial kidney was considered and was indicated because of a potassium level of 7. However, there were too many contraindications and the consultant recommended temporary use of sodium exchange resins. In spite of supportive measures her blood pressure began to fall some 20 hours after admission and did not respond to hypertensive drugs. She was pronounced dead 21 hours after admission.

Autopsy showed (1) nephritis, focal, probably secondary to nephrotoxic agent of undetermined etiology, (2) tracheobronchitis, acute, (3) endometritis, acute, (4) incomplete abortion, (5) hydrothorax, bilateral. The pathologist thought that the principal disease was in the kidney and the other changes were probably secondary to the renal disease and its consequent uremia.

CASE REVIEW

This case was reviewed by the Committee on Maternal and Child Care at its regular quarterly meeting and the following evaluations made:

I. Adequacy of Data. Data obtained in this case were rated five on a scale of one (minimal) to five (completed data sheet, relevant explanatory note, and autopsy report).

II. Cause of Death. This was considered to be a direct obstetrical death due to septicemia following infected abortion with resulting renal failure.

III. Avoidability. In ascertaining avoidability the Committee, following the AMA Guide for Maternal Death Studies, assumes (1) that the physician possessed all the knowledge currently available and relevant to the factors involved in the death, (2) that he had a high level of technical ability by experience, and (3) that he had available to him all the facilities present in a well-organized and properly equipped hospital. This death was considered avoidable.

IV. Avoidable Factors. Avoidable factors are generally considered to be professional, hospital, or patient factors. In this case the failure of the patient to clarify her history for the first physician could have been avoided. Perhaps earlier diagnosis on the part of the physician who first saw the patient might have led to prompt, energetic treatment. Finally, if the patient's renal failure could have been appreciated, earlier dialysis might have been practicable before she became moribund.

DISCUSSION

This is one of the earliest deaths reported to the Committee and it appeared that the major factor responsible for the death was the patient's unwillingness to report the possibility of a miscarriage. Abortion is, of course, a common event and is usually completed without serious complication or impairment of future reproductive function. Occasionally, however, tragic consequences occur. The more serious of these is septicemia due to gram-positive bacilli. Severe prostration of the patient and death may result with or without renal damage, such as occurred here.

This case serves to emphasize the importance of including a menstrual and reproductive history and of performing an adequate pelvic examination as part of the general workup of the female patient.

Once the diagnosis of abortion is suspected and if the patient has fever, it is essential to obtain bacteriologic studies of the cervical discharge. Ideally, these should consist of a gram stain and aerobic and anaerobic cultures. Failure to do a complete examination may sometimes result in missing the diagnosis of clostridial infection. Once the diagnosis of septicemia is established, treatment must be vigorous, using antitoxin and antibiotics in full dosage. The advisability of completing the evacuation of the uterus by a curettage should be strongly considered where the patient does not respond to antibiotics. Awareness of the possibility of renal failure should lead to careful measurement of the urinary output and the institution of measures to restrict fluid intake and to avoid dangerously high levels of potassium.

SUMMARY

1. A completely documented maternal death due to septicemia following infected abortion with subsequent renal failure is reported.

2. The management of this problem is discussed. ★★★

203 West Congress Street

Bursae, Bursitis, and Tendinitis

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The author discusses conditions which are likely to affect the bursae, tendons, tendon sheaths, ligaments, and peripheral nerves. Etiology, diagnosis, and treatment for bursitis and tendinitis are considered. The author closes with a review of affections of specific bursae and tendons.

A BURSA IS AN ENDOTHELIAL lined sac capable of secreting a fluid more viscous than lymph which acts as a lubricant preventing friction between two tissues gliding one upon another. They are usually located where skin, tendon, muscle, or ligaments pass over a bony prominence. A bursa is similar to any synovial lined space, such as a joint or a tendon sheath, and is therefore subject to the same diseases, injuries, or insults.

ADVENTITIOUS BURSAE

An adventitious bursa is a false bursa; it is never present at birth but is acquired. It has no true synovial lining and therefore no secretory cells, but a mucin-like substance is formed in its early development. Repeated trauma to soft tissue over bony prominences is thought to be the primary cause, and the process of formation is one of mucoid or myxomatous degeneration of connective tissue. The stages in its formation are (1) necrotic changes in the connective tissue, (2) increase in capillaries and lymphocytes in the area, and (3) formation of a cavity filled with degenerative mucoid material. It may occur over a kyphotic spine, over an old angulated fracture, or over growths like osteomas or osteochondromas.

Both true and adventitious bursae are subject to the same pathologic changes: infection, enlargement, metabolic diseases, toxicity, allergic reactions, and neoplastic growths.

BURSITIS: ETIOLOGY

Bursitis may be the result of (1) sudden, severe, or repeated trauma, (2) infection by pyogenic, tuberculous, or other pathogenic organisms, (3) metabolic disease with resultant local effects (for example, gout), (4) allergic reactions, and (5) neoplastic growths of all types in or adjacent to the bursa.

DIAGNOSIS

In establishing a diagnosis of bursitis one must be thoroughly familiar with the normal bursae of the body, their location and extent, and ever aware that abnormal growths and irregularities may produce adventitious bursae.

As in establishing any diagnosis, an essential step is a thorough history of the onset and development of the chief complaint. Here it is of extreme importance that one pay attention to the patient's occupation and avocations, particularly as may relate to repeated trauma. One must also search carefully for the presence or absence of infection in all parts of the body. Next in importance is to review the possibility of metabolic disease. You must also keep ever in mind the rare possibility of a neoplastic growth, either benign or malignant, in or near a bursa.

The most difficult part in diagnosis has to do with differential diagnosis as relates to injury or insult to muscles, tendons, ligaments, nerves, bones, or joints. A primary differential diagnostic difficulty is presented by tendons and tendinitis with or without calcium deposits. X-ray examination of both bone and soft tissue in the area of involvement is imperative and must include films in two or more planes: that is, anteroposterior and lateral views. When calcification in the rotator cuff of the shoulder is suspected, films of the shoulder should be made in internal and

From the Campbell Foundation and the University of Tennessee College of Medicine.
Read before the Section on General Practice, 93rd Annual Session, Mississippi State Medical Association, Biloxi, May 9-11, 1961.

external rotation. Another real problem is the possibility of nerve involvement, as in the "shoulder-hand syndrome" from ruptured cervical disc or other forms of peripheral neuritis.

If these possibilities are kept carefully in mind, an accurate diagnosis can usually be established.

TREATMENT

Once an accurate diagnosis is established, treatment should be instituted immediately. Remember always that the patient's primary concern is relief from pain.

Removal of the Cause

(a) Specific therapy for combating any systemic disease.

(b) Eradication of local foci of infection.

(c) Where indicated, change or adjustment of occupation.

(d) Removal or treatment of any neoplastic growth.

(e) Treatment of any metabolic or allergic condition.

Specific Therapy

(a) Rest, elevation, and immobilization. Institute complete rest of the involved part by splinting or traction. Remember that elevation insures better venous and lymphatic drainage, while the arterial supply is nearly always adequate for any area of the body regardless of its position. Venous stasis may occur from insult or injury and is usually aggravated if the part is in a dependent position.

(b) Local heat. Moist heat in the form of whirlpool baths, Hydrocollator packs, poultices, and soaks are of great benefit in relieving pain and reducing the reaction in a bursitis due to trauma, infection, or metabolic disease.

(c) Pressure bandages. Mild pressure applied with an Ace or elastic bandage, bias shirting, or Webril is often of considerable benefit in relieving painful tension and preventing swelling.

(d) Medication. Sedatives for the relief of pain, and appropriate antibiotics should be instituted as soon as indicated.

Radiation

(a) Roentgen ray therapy is of considerable benefit in acute and subacute cases of true bursitis. However, it is of little or no benefit in chronic bursitis, or chronic tendinitis, particularly if there are calcium deposits in the area. Radiation will not dissolve calcium.

(b) Ultrasound is of some benefit where there is a gliding surface as in tendinitis and tendovaginitis. Where adhesions have formed between two inflamed surfaces, the ultrasound wave appears to produce some dissolution with relief of symptoms. But the use of ultrasound has been far oversold and is of little or no benefit in bursitis or fibrositis.

Surgery

(a) Aspiration. Acutely distended bursae should be aspirated for two reasons: excessive hemorrhage, as in acute traumatic bursitis, and painful distention of the bursa by fluid. The simple presence of fluid is no indication for aspiration.

In the presence of excessive hemorrhage following acute trauma, wait 24 to 36 hours before aspiration. If the hemorrhagic material is removed too early, there will immediately be a second bleeding into the bursal sac. The capillaries and arterioles which have been injured require several hours to thrombose. After 24 to 36 hours, if aspiration is adequate and a pressure bandage applied, there will be considerable relief. It has become common practice, after aspiration of joints, bursae, or tendon sheaths, to infiltrate the area with 1 or 2 cc. of a hydrocortisone derivative; we have found this of some benefit.

(b) Drainage. Fortunately, at the present time, one seldom sees excessive suppuration or extensive infectious bursitis. Most patients receive adequate treatment early, and therefore do not get into these appalling advanced stages. But when they occur, they may demand surgical drainage just as a furuncle or abscess.

(c) Excision. In bursitis of long standing that has developed a chronic villonodular reaction, surgical excision of the entire bursa is the procedure of choice. It should be carried out under the most strict aseptic technic and under general, not local, anesthesia. The entire bursal sac should be extirpated. It is often difficult to remove the sac *in toto* without its rupturing during surgery, but this is of little consequence, since after rupture the bursal tissue can still be completely excised.

Rehabilitation

(a) Local rehabilitation has to do primarily with restoration of the musculature of the involved area and re-establishment of normal gliding mechanisms. This is best done as soon as the pain is relieved, by application of local heat, careful massage, and progressive active weight-resistant exercise.

(b) General restoration of the patient as a whole is imperative. When a bursitis involves any portion of an extremity, there will be considerable atrophy of all its musculature, and consequently loss of function. Therefore, a comprehensive plan of progressive rehabilitation of the entire patient is necessary.

(c) Mental rehabilitation or motivation is being recognized as more and more important in the practice of medicine and surgery. We recommend in this phase of rehabilitation that a gentle, but firm and conclusive manner be used to instruct the patient in the prime purpose of treatment: i.e., not merely restoration of the part, but of the body as a whole. It is the physician's primary obligation to see that his patient is restored to economic solvency, and that he be able to return to his previous occupation. Without proper motivation and a good mental attitude it is often impossible to return a patient to his previous occupation for many weeks or months, even after his disability has been relieved.

TENDINITIS

Tendinitis and tendovaginitis, with or without calcification, have been recognized by the medical profession for many years. When calcium deposits are present within a tendon or tendon sheath, they can be extremely painful. In essence a mechanical or chemical furuncle has developed which has all the appearance of an infection. Signs and symptoms are an increase in local temperature, redness, swelling, fluctuation, extreme tenderness, and loss of function. Calcium deposits are easily recognized by the exquisite point tenderness, and are confirmed by x-ray. They may be of the soft and acute type, or well-organized, firm, and hard; in some rare cases they may have been converted to true heterotopic bone. Tendinitis or tendovaginitis is usually the result of formation within the tendon sheath of acute, subacute, or chronic adhesions which impede the normal gliding mechanism. Any of the conditions mentioned previously which produce bursitis may also cause tendinitis.

MANAGEMENT

The general plan of treatment for tendinitis or tendovaginitis is essentially the same as that for bursitis. We are dealing with endothelial lined sacs or tubes which have become involved by one of the conditions mentioned above. We would like, however, to highlight the specific forms of therapy which are of most benefit in acute and subacute cases. Ultrasound appears to be of some benefit, but should not be applied for more than 2 or 3 times. Local anesthesia infiltrated into the sheath, followed by instillation of 1 to 2 cc. of a hydrocortisone derivative, has proved very effective. Surgical intervention in some cases is occasionally beneficial; this will be discussed later.

AFFECTIONS OF SPECIFIC BURSAE AND TENDONS

Some bursae and tendons show outstanding predilections for involvement and should be given specific consideration in this discussion.

THE SHOULDER

There are many lesions about the shoulder which may produce pain similar to that of bursitis. The most common, under an all-inclusive term, is the "shoulder-arm syndrome," in which the pain may be due to anything from a fractured carpal navicular to a ruptured cervical disc. Therefore, differential diagnosis should include a thorough scrutiny of the entire limb and of the patient as a whole.

In considering primary bursitis of the shoulder we are concerned mostly with the subdeltoid bursa, secondly with the subscapularis, and thirdly with the coracoid. True bursitis may occur in any one of these bursae, but a more common cause of pain about the shoulder is tendinitis with or without calcium deposit. In recent years the condition of bicipital tenosynovitis (involving the long head of the biceps) has become a very popular diagnosis. De Palma[1] believes that most so-called "frozen shoulders," or extensive pericapsulitis of the shoulder, begin as a result of inactivity caused by painful adhesions around the biceps tendon. Not all pericapsulitis is secondary to bicipital tenosynovitis, but when present it certainly is a painful and devastating condition which demands extensive and often heroic treatment.

As previously stated, in the acute or subacute stage of tenosynovitis, local treatment with or without ultrasound or x-ray therapy will give relief in a few cases. The next step is infiltration into the bicipital groove of a local anesthetic, followed by instillation of 1 to 2 cc. of hydrocortisone or a derivative. If this injection is properly performed, the patient can immediately move the shoulder through a full range of motion, for this frees the adhesions and in many cases affords complete relief of pain. In chronic or long-standing bicipital tenosynovitis when there is considerable restriction of motion in the shoulder and the patient has not responded to conservative

treatment, surgical transplantation of the long head of the biceps should be performed. This can be done by transplanting the biceps tendon into the coracoid process so that both the short and the long heads of the tendon have the same attachment. However, local implantation of the biceps tendon into the cancellous bone of the humeral head at the level of its groove is the surgical procedure of choice. The technique for this procedure is relatively simple. The function of the shoulder is restored, and the function of the biceps muscle is just as efficient, since its primary action is to flex the elbow and supinate the forearm.

When the rotator cuff of the shoulder is involved, there may be an acute or chronic tear, or progressive degeneration of tendon fibers in the rotator cuff, with or without calcium deposits. The primary muscles and tendons making up the rotator cuff are from front to back, the subscapularis, the supraspinatus, the infraspinatus, and the teres minor. In most cases, when any tendon in the rotator cuff is ruptured or involved by calcium deposition, it is the supraspinatus. For it is at this point that the maximum load is applied to the shoulder as it hangs from the pectoral girdle; here also is the point of rotation of the shoulder and the area which receives the maximum strain in the act of throwing, as in pitching baseball.

In an acute tear of the supraspinatus tendon, in a patient under 35 years of age, immediate surgical repair should be performed. When the tear is incomplete, or occurs in older people, the procedure of choice is conservative therapy. Whether postoperatively or in conservative treatment, the arm is maintained on an abduction humerus splint for three to five weeks, and then in a sling for one to two weeks. Gradually, motion is allowed, and progressive weight-resistant exercises are begun.

When a calcium deposit is demonstrated in the rotator cuff, and is associated with localized pain, immediate treatment is mandatory. Under local or general anesthesia, depending primarily on the temperament of your patient, and under strict sterile operating-room (not office) technique, the area is needled. If you prefer, the deposit can be surgically removed through a short muscle-splitting incision. Immediately after operation or needling, the arm should be placed on an abduction humerus splint at about 30 to 45 degrees of abduction, and ice caps applied for 24 hours; this is followed by hot packs for the second 24-hour period. Physiotherapy in the form of local heat and active exercise three or four times a day will aid a great deal in restoring the function of the shoulder and arm. In chronic or longstanding involvement, or in patients who have developed adhesive capsulitis (periarthritis), intensive active and passive exercises over a prolonged period of time are indicated. Warn your patient in the chronic case that improvement will be extremely slow, and that recovery will require many months. However, a good final result can be anticipated in the majority of instances.

Manipulation of the shoulder under anesthesia is seldom if ever indicated, and when undertaken must be accomplished with great caution. McLaughlin,[2] who has written extensively on this problem, believes that you tear many normal structures and very few adhesions when you manipulate "frozen" shoulders under anesthesia.

It is well to remember that after the age of 26 most of us show a progressive degeneration of the fibrous connective tissues of our bodies, and in no place is this better illustrated than in the rotator cuff of the shoulder. You can estimate a man's age very accurately by the amount of external rotation present in his shoulders. Thus as a professional athlete reaches 35 to 40 years of age, the degeneration and fibrosis in his rotator cuffs will as a rule preclude his throwing a baseball or football with any great speed or accuracy.

THE ELBOW

The most common lesions about the elbow resulting from involvement of bursae or tendons are olecranon bursitis and "tennis elbow." It is well to remember that the term "tennis elbow" has come to represent a number of lesions: epicondylitis of the lateral or the medial epicondyle, bursitis over the radial head, synovitis between the capitellum and the radial head, and degenerative fibrositis of the annular ligament. These conditions respond to the principles of treatment outlined above, but may run the gauntlet from rest and heat, through needling and hydrocortisone injections, to surgical intervention.

THE WRIST

The wrist is subject to lesions similar to those described for the shoulder and elbow, and again the principles of treatment follow a similar pattern. One very common specific lesion is De Quervain's disease, or tenosynovitis of the long abductor of the thumb. This condition, which is painful and disabling, used to be treated by pro-

longed splinting and local heat, while those cases which failed to respond were then relieved by surgical excision of a portion of the tendon sheath, thus relieving the restriction between the enlarged tendon and its sheath. Most of these cases can now be relieved by local anesthetic and hydrocortisone injection.

A common condition which is extremely painful is calcium deposition in the flexor carpi ulnaris or radialis tendons. These as a rule will respond quite dramatically to needling under local anesthesia.

A kindred but different lesion quite common about the wrist is the carpal tunnel syndrome so well described and documented by Cannon.[3] This lesion, which produces pain over the volar surface of the wrist and hand, with sensory changes over the distribution of the median nerve in the index and middle fingers, is best relieved by surgery. A lazy-S incision over the volar creases of the wrist exposes the carpal tunnel, and the volar carpal ligament is sacrificed, releasing the pressure on the median nerve. Results from this procedure are most gratifying.

BACK, PELVIS, AND LOWER EXTREMITIES

Bursitis and tendinitis in these regions all fall into similar patterns of pathophysiology, and respond to treatment as outlined for the shoulder and arm.

CONCLUSION

If we will keep in mind the conditions which are likely to affect our bursae, tendons, tendon sheaths, ligaments, and peripheral nerves, and will remember to investigate each in turn when our patients' complaints point to these various areas of the body, we will be good diagnosticians. Therapy, when applied after a correct diagnosis, leads to ultimate success in a high percentage of cases, with relief of pain and restoration of function. ★★★

869 Madison Avenue

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4. Stewart, M. J.: Aspects of Physical Reconditioning, J. Bone & Joint Surg. 31-A:394, 1949.
5. Stewart, M. J.: Rehabilitation in Athletes, Am. Acad. Orthop. Surgeons, Instructional Course Lectures 16:-45, St. Louis, the C. V. Mosby Company, 1959.

DERANGED CONSULTATION

A man had escorted his wife to the psychiatrist's for her first appointment and was in the reception room when she emerged from the office.

"Did you make any progress, doctor?" asked the husband, noting that it had been a long session.

"Not very much," the psychiatrist admitted. "Your wife spent most of the time having me move the couch to see if it wouldn't look better in some other part of the office."

Clinicopathological Conference XIX

Conducted by the Department of Pathology
University of Mississippi School of Medicine
Jackson, Mississippi

The patient in CPC XIX had a history of development of illness with weight loss, right upper quadrant pain, and a large mass occupying the great majority of the abdomen. The mass was stony hard and nodular, and there seemed to be ascites without any great amount of generalized edema. Laboratory studies showed a marked abnormality of bromsulphalein disposal. Discussers are Drs. Herbert G. Langford, Robert D. Sloan, John R. Snavely, and John A. Gronvall.

Dr. Herbert G. Langford: "Rather than reading the protocol I am going to pick out the few critical features and discuss them. First, there is his right upper quadrant pain of two to three months' duration, which was dull and continuous and relatively nonspecific. I think this pain is not that of ulcer or gallbladder. There is anorexia which goes along with other symptoms we shall discuss later. His high fever is of considerable interest. We will later deal with the liver and have to explain or explain away this finding. The weight loss and anorexia are nonspecific and the abdominal swelling is of much interest. The past history of lack of alcoholism becomes important later on.

"The pertinent findings on physical examination included the appearance of chronic illness and the findings compatible with fluid over the lung bases. A large nodular mass described as firm was found in most of the abdomen. Dr. Snavely examined this patient and said the mass was quite hard, and I do consider this of some importance. When we feel something stony hard, we think of a neoplasm. There was also ascites.

"So, we have a colored man with development of illness with weight loss, right upper quadrant pain, and this huge mass occupying the great majority of the abdomen. This mass was stony hard and nodular, and there seemed to be ascites without any great amount of generalized edema.

"The laboratory studies are of some help. He was not grossly anemic. The total protein was down a bit, mostly in the albumin, the globulin was up just a shade. There was marked abnormality of bromsulphalein disposal, 47 per cent retention in 45 minutes. There was a small amount of bilirubin retention, 3.7 mg. per cent, and very little sign of dying liver cells. The cephalin flocculation was 1+.

"There was also a very interesting laboratory finding of 0 alkaline phosphatase. The syndrome known as hypophosphatasia is primarily a pediatric syndrome involving the bones and increased excretion of phosphoethanolamine. A few adult cases have been described, but I do not believe it is at all pertinent. I think we have to say that this alkaline phosphatase value is absolutely unreliable, and we need not pay any attention to it.

"What can we make out of this? Despite this tremendous mass, which if it were not the liver, it was snuggling close around it, there was very little interference with bilirubin excretion. There were very few dying cells, but there must have been a good deal of hepatectomy as shown by the marked abnormality of BSP disposal. I think that the BSP disposal can be used as a rough measure of the amount of functioning liver tissue and that this amount was considerably reduced. He was partially hepatectomized. There was also abnormality of the prothrombin time. Whether this was due to the hepatectomy with consequent inability to manufacture enough appropriate substances or partially due to failure of absorption of vitamin K, I do not think we can say as we did not get a chance to see if this responded to exogenous parental vitamin K. I would guess that it represented primarily hepatectomy. So, to recapitulate, we have a sick man with a mass ap-

parently in the region of the liver, and laboratory studies which suggest that he was partially hepatectomized. There were some x-rays taken, I believe."

Dr. Robert D. Sloan: "Routine PA and lateral chest films revealed considerable elevation of the right hemidiaphragm along its entire course. There was some minor pleural and parenchymal reaction at the right base, but surprisingly little considering the degree of elevation of the diaphragm. The chest was otherwise within normal limits for the man's age. An AP view of the abdomen revealed an increased soft tissue density in the upper abdomen, and in the lateral this density projected anteriorly as one would expect with an enlarged liver. No other soft tissue abnormalities were noted, and the bony structures appeared normal save for moderate osteoarthritic degenerative changes."

CAUSES OF HEPATOMEGALY

Dr. Langford: "Thank you. I think that is of considerable value. The finding in the physical examination of decreased breath sounds was due to lung compression from below and not to pleural fluid. It is easy to make this mistake on physical examination. This man had some illness that caused his liver to enlarge tremendously, and we should briefly review the classical causes of hepatomegaly and discard most of them.

"I. Venous congestion. You do not have a hard nodular liver with this, and we certainly do not have any signs of marked congestive failure or a constrictive pericarditis or of hepatic venous thrombosis which, of course, will produce this. The latter is a rather short syndrome as a rule, and therefore does not have to be considered.

"II. Obstruction of common bile duct. This is also absolutely ruled out for I would anticipate marked elevation of bilirubin in this situation, and I would not anticipate these nodular lesions.

"III. Infection, with multiple abscesses or amoebic abscesses. This cause could be a nice sleeper, and we are occasionally caught this way. The history of high fever early in the game might be slightly suggestive of this condition. The absence of leukocytosis and the remission of fever would make it hard to make the diagnosis of pyogenic abscesses. I think that it would require findings of leukocytosis and fever to make the diagnosis of amoebic abscess, and I believe that most of these patients are acutely ill. Also, I would not anticipate a multinodular liver in this situation.

"A diffuse infection, we must mention diffuse tuberculosis, of the liver does occur. The few patients that I have seen had skin anergy to tuberculin and were originally diagnosed as sarcoid. They did have marked elevation of alkaline phosphatase, but as I have thrown out the alkaline phosphatase absolutely, I cannot use that against it. I think this is unlikely, and I will not pursue it further. I think that the clinical course and the description of the liver rule out a diffuse enlargement as one would get with infectious hepatitis. I do not think that needs to be considered at all.

"The possibility of a multinodular cirrhosis must be considered. I think against this is the size of the liver as described, the rather rapid progression of the illness, the lack of more laboratory signs of hepatocellular disease and perhaps the death four days later. This is not absolutely ruled out, but it seems to me awfully unlikely. In sarcoid of the liver, the organ should not be multinodular, and I have not seen it this large. The disease seems to have progressed too rapidly for amyloid disease or hemochromatosis, and the liver seems too large.

"So, I think that I must get down to the thing that was immediately apparent to everyone, even the sophomores, that neoplasm of the liver was the most likely thing. The possibility that this might be a lymphoma would be the most important thing to rule out because this is frequently a treatable disease. The patients that I have seen with massive Hodgkins or similar involvement of the liver were more grossly hepatectomized than this patient is. They had greater elevation of bilirubin and even greater abnormality of BSP disposal. One frequently has nodes elsewhere but not invariably. I would say that Hodgkins or similar lymphoma would be unlikely but not impossible.

"From the description, if you forget the frequency, I would say primary and metastatic neoplasm of the liver were equally likely. I read two texts on this. One said that with primary neoplasm of the liver you frequently got a little bilirubin elevation in contradistinction to metastatic. The other one said exactly the opposite so I had trouble choosing between these two. Actually, I expect to see it in both.

PRIMARY NEOPLASM OF LIVER

"Part of the conventional wisdom is to say that the primary hepatic cell neoplasm of the liver, the more frequent primary neoplasm, is much more likely to occur in the cirrhotic liver. I do not really know that he does not have inactive cirrhosis. I think it unlikely that he has active cirrhosis. I recently read a write-up of the situation of primary neoplasm of the liver in the area that has most neoplasm of the liver, which I be-

lieve is South Africa. The article stated that while cirrhosis and neoplasm are both of epidemic occurrence in the population, the coexistence is much less frequent than formerly thought. The authors felt that these are differing responses to similar injuries. I believe, though, in the American experience that the majority of hepatic cell carcinoma still occurs on the basis of a cirrhotic liver. For metastatic carcinoma of the liver one prefers to be able to find a primary site, but frequently one cannot. I have no real reason to pick out any primary site for metastatic disease in this patient. There are no symptoms pointing to the kidney or the stomach or to the bowel or to the lung as primary sites, and Dr. Sloan noted no carcinoma of the lung, a frequent cause of metastatic neoplasm of the liver. Of course, this does not rule it out. He might have had a small and unapparent one.

DISCUSSER'S DIAGNOSIS

"Now, I must make a choice. The odds are loaded 25:1 against primary neoplasm of the liver. I think that I will choose it because of the statement in the better written text that jaundice is much less likely to occur with primary than with metastatic neoplasm of the liver. Dr. Snavely, you know the diagnosis but are there any statements that you can make on that reasoning rather than on the diagnosis at this stage?"

Dr. John R. Snavely: "No, I cannot add a thing."

Dr. Langford: "This is bad. He missed it too. I must be going down the same lane."

Dr. John A. Gronvall: "Thank you, Dr. Langford. In our autopsy protocol, we have a statement that the alkaline phosphatase was 14.4 and that acid phosphatase was 0. I presume that will not alter any of your thinking."

Dr. Langford: "No."

Dr. Gronvall: "At autopsy, the patient had about 3 liters of blood tinged peritoneal fluid. He had only a small amount of fluid in each pleural cavity. The liver was tremendously enlarged weighing 6,150 gm., so it was three or four times larger than a normal liver. On the surface of the liver there were innumerable nodules with intervening small, smooth areas. On cut section there were small areas where the liver was fairly normal, but most areas were replaced by nodules which had a different appearance in that they were different in color and texture from the more normal appearing liver. Some of these nodules grossly had a rather distinct yellowish tan color to them. There was no one single large tumor mass in any area of the liver. The largest of these nodules measured about 3 cm. in diameter.

"So we have a liver which was extensively replaced by multiple tumor nodules. Histologically, this tumor had several different growth characteristics. There were areas where the tumor seemed to have grown in a nest-like arrangement, being separated from adjacent nests or trabeculae of tumor by strands of fibrous tissue, in some of which there were a few intact or residual liver cells. In some areas there were small spaces resembling acinar or gland spaces surrounded by tumor cells and in these spaces there was brownish pigmented material. We interpreted this brownish pigment to be bile, and we felt that the tumor cells were probably actually forming and excreting bile into these spaces.

"This feature is said by many physicians to be pathognomonic of liver cell carcinoma. Actually, in some cases of metastatic tumor in the liver with an extreme degree of jaundice one can find bile present in glands in a metastatic adenocarcinoma, so I do not believe that this feature in and of itself is entirely specific, but when the rest of the histology of the tumor is consistent with liver cell carcinoma this is an extremely helpful finding.

"There are other areas in this tumor where the cells had a sharp resemblance to liver cord cells with rather large amounts of eosinophilic cytoplasm. These tumor cells had large nuclei with a very densely stained nuclear membrane and in many of these tumor cells there were prominent nucleoli. These are features that are indicative of liver cell carcinoma. I might say that we did not find any evidence of a primary tumor in any other organ.

AUTOPSY DATA

"On the pleural surfaces and scattered throughout all areas of both lungs there were many small tumor nodules seen. In addition to the tumor there were multiple premortem clots present in small branches of pulmonary arteries. Microscopically, in every area of lung there were multiple tumor emboli present in the small pulmonary arteries, in addition to the large tumor nodules spreading into the lung parenchyma. Many pulmonary vessels contained premortem thrombi or emboli, some of these in relation to tumor in the vessels, but others occurring without association to tumor. The tumor and the ordinary thrombi or emboli were varied in their proportion in the different parts of the lung. There were multiple thrombi in the periprostatic venous plexus which would be a good source for pulmonary emboli.

Some of the clots in the lungs, however, were probably pulmonary thrombi forming locally in the pulmonary vessels. There were some areas where there was tumor in the vessel wall with thrombus superimposed on the tumor.

CASE INTERPRETATION

"We interpreted this case as primary carcinoma of the liver. Histologically, we felt that it was a carcinoma derived from liver cord cells rather than the cholangiolar type of tumor. The hepatic cell carcinomas are, as was mentioned, considerably more common than are bile duct carcinomas. I might add as a last point that in sections of liver showing some of the residual liver tissue between tumor nodules we could not find any real evidence of a pre-existing cirrhosis. This is contrary to the usual statistics at least for this country, but it is not a rare finding to find a primary liver carcinoma without pre-existing cirrhosis."

Dr. Langford: "Perhaps he was of Bantu stock?"

Dr. Gronvall: "He may well have originally been of Bantu stock."

Dr. Snavely: "I would just like to say that I think that Dr. Langford wound this up beautifully, and that a junior student on the ward also made the correct diagnosis. The other tiny point that I would make is that a year or two ago I collected some material on this problem and found the percentage of pre-existing cirrhosis as low as 50 per cent, depending on series. In another series it was as high as 80 per cent. The second thing that has become evident in recent years is that within the so-called Laennec's cirrhosis package there is one variety which is clearly related to malnutrition and another variety which is not. In the nutritional variety primary liver cancer is uncommon, and in the non-nutritional variety it is very common indeed. This may turn out to be of diagnostic value."

Dr. Langford: "There was a preliminary report from South Africa that alloxan was of value in treating hepatic cell carcinoma. Has this been followed through?"

Dr. Snavely: "All I saw was this one report that you refer to."

Dr. Langford: "As this seems to be a functioning tumor, I would like to suggest that this may well be a neoplasm for which palliative therapy will be devised soon."

Dr. Gronvall: "It is true that in liver cell tumors one can actually see bile pigment being formed in the tumor cell cytoplasm."

MULTIFOCAL ORIGIN

Dr. Snavely: "Do you feel that these tumors arise as a single mass with metastases in the liver, or as multifocal tumors?"

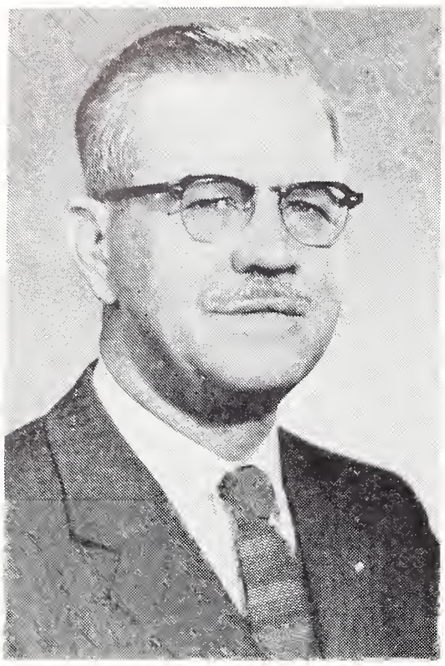
Dr. Gronvall: "It is usually said that in liver cell carcinoma where there are multiple nodules there should be one that is larger and looks like the mother of all the others. In this case we did not find one large tumor. I think that it is probably pretty well agreed that these tumors develop out of the liver that is being subjected to some sort of noxious stimulus, and I think that it is easily possible that they may develop in multiple sites in the liver. Often in severe cirrhosis one finds multiple areas where there are nodules of atypical liver cells that with a little bit more stimulation could become multiple tumor nodules, so I would say I feel that multifocal origin is likely." ★★★

2500 North State Street

DEAFENING SILENCE

The stewardess was talking to a passenger on the plane. "I don't know how it happened," she said, "but we seem to have left your wife behind in Chicago."

"Thank heaven," said the husband. "I thought I had gone deaf."



The President Speaking

'A Ton of Coal'

LAWRENCE W. LONG, M.D.
Jackson, Mississippi

FIVE MONTHS ISN'T MUCH TIME during which to reappraise an attitude 25 years old but it's all the time Mississippi physicians have for doing it. When the 1962 regular session of the legislature convenes in January, the doctors of the state must be ready to say yes or no to a critical question: Shall they be paid for rendering services to the indigent under public medical care plans?

A complex, fast-breaking series of events have forced the question but even if this were not the case, it's time to reexamine 1936 thinking on the part of physicians. Significantly greater indigent patient loads, the advent of the Kerr-Mills program, and suspicion on the part of some lawmakers that the doctors will just rock along, giving their services, come what may, requires a unified, positive response from Mississippi medicine, be it yes or no.

Every member of the Mississippi State Medical Association is interested in and dedicated to the proposition of providing the best possible medical care to all citizens of our state. Especially does this concept apply to those unable to purchase medical care. No idle words, these, because since the original enactment of our care-for-the-indigent program in 1936, Mississippi physicians have been giving their services without charge. And they've done more than that, too.

When, after futile effort in two sessions of the legislature, the hospitals of our state needed assistance in increasing the appropriation for the State Hospital Commission program, physician influence was a major—if not the determining—factor in pushing the fund up to the $1.5 million mark. Many will recall the contention of the hospital representatives who said that ". . . when the state of Mississippi buys a ton of coal, it pays the going price but when it buys a day of hospital care, it wants it for less than cost."

Here is another critical question: How much longer can doctors care for the indigent sick without applying the ton of coal concept to their respective practice situations? Six out of 10 physicians in this state are under age 49 and four of them are still in their thirties. Many are in debt for their education and most are still building a practice. The welfare load seems to grow in spite of our state's unprecedented prosperity. The practice of medicine

(Turn to page 417)

Proceedings of the House of Delegates

93rd Annual Session
May 9-11, 1961
Biloxi, Mississippi

THE 58TH ANNUAL SESSION of the House of Delegates was convened during the 93rd Annual Session of the Mississippi State Medical Association on May 9, 1961, in Hurricane Room D, the Buena Vista, at Biloxi, Mississippi, at 9:10 a.m. by Dr. G. Swink Hicks, President. The invocation was spoken by the Reverend William Whaley, Pastor, Biloxi Methodist Church.

After extending greetings and making prefacing remarks, Dr. Hicks introduced the Speaker *pro tempore,* Dr. Lawrence W. Long, Jackson, who was appointed to serve in the absence of Dr. Howard A. Nelson, Greenwood, the Vice Speaker of the House of Delegates, and Dr. B. B. O'Mara, Biloxi, the Speaker, who then assumed the chair. Dr. William E. Lotterhos, Chairman of the Reference Committee on Credentials, reported the presence of a quorum of registered and seated Delegates in accordance with Section 3, Chapter V, By-Laws of the association.

APPOINTMENT OF TELLERS AND SERGEANTS-AT-ARMS

John G. Caden, Jackson
Joseph B. Rogers, Oxford
A. T. Tatum, Petal

ANNOUNCEMENT OF REFERENCE COMMITTEES

Reports of Officers and Board of Trustees
H. C. Ricks, Sr., Jackson, Chairman
W. H. Kisner, Natchez
Omar Simmons, Newton
J. T. Davis, Corinth
William A. Middleton, Winona

Medical Practices
Lamar Arrington, Meridian, Chairman
Thomas K. Chandler, Jr., Tunica
C. R. Jenkins, Laurel
C. C. Thompson, Jr., Columbia
C. D. Taylor, Jr., Pass Christian

Miscellaneous Business
Stanley A. Hill, Corinth, Chairman
William W. Oser, Jr., Picayune
Thomas N. Braddock, West Point
F. C. Minkler, Pascagoula
James Grant Thompson, Jackson

Credentials
William E. Lotterhos, Jackson, Chairman
Eldon L. Bolton, Biloxi
Elton S. Thomas, Columbus

Rules and Order of Business
W. Winston Barnard, Clarksdale, Chairman
Walter M. Coursey, Raleigh
Walter D. Gunn, Quitman

REPORT OF THE REFERENCE COMMITTEE ON RULES AND ORDER OF BUSINESS

Dr. W. Winston Barnard: Your Reference Committee on Rules and Order of Business invites the attention of all delegates to Chapter V, By-Laws of the association, in which responsibilities and the procedural format of this House are prescribed. It will be the purpose of your Committee to assist the Speaker and Vice Speaker in the orderly and expeditious conduct of all proceedings in this House.

Business of the House of Delegates is conducted in accordance with *Robert's Rules of Order, Revised* and we recommend that the Speaker and Vice Speaker prescribe the order of business so long as such order and agenda are compatible with the By-Laws and with normal custom and usage.

To insure proper recording of the transactions about to begin, it is recommended that all delegates recognized by the chair be required to identify themselves. We further recommend that unanimous consent of the House of Delegates be required for extending the privilege of the floor to any individual who is not a member of this House of Delegates or who does not otherwise have an official capacity in the association. To expedite the transaction of business, it is recommended that the report of the Reference Committee on Credentials be accepted as the formal roll call and so recorded officially both for the present meeting of the House and the adjourned meeting. Further, it is recommended that reporting officers and representatives of official bodies read all or such pertinent portions of their respective reports as may

be deemed necessary to convey full information and understanding.

Your reference committee acknowledges with appreciation the presence of a number of distinguished guests. We recommend that the privilege of the floor be extended to the principal guest speaker, the President-elect of the American Medical Association, and to such other distinguished visitors and personages as may be recognized by the chair.

Your reference committee emphasizes that all reports and resolutions should be referred to the appropriate reference committee by the chair immediately after presentation, the only exception being those which are such a nature as to require no further consideration, debate, or study and are, therefore, ready for decision by vote of this House. We recommend that debate on the floor be reserved until such time as action is recommended by appropriate reference committee and that all delegates thus give diligent attention to expediting the business of this House. It is recommended that delegates attend reference committee hearings and participate in debate at those times.

To avoid burdensome tasks upon the several reference committees and to insure that all members have adequate opportunity to discuss issues before this body, it is recommended that the House permit introduction of no resolutions after the present initial meeting except for (1) matters of an emergency nature, such emergency to be determined by a majority vote of this House, and (2) matters relating to a scientific section or section work.

The report of the Reference Committee on Rules and Order of Business was unanimously adopted.

On motion by Dr. H. C. Ricks, Sr., second by Dr. C. W. Patterson, the Transactions of the 57th Annual Session of the House of Delegates, 92nd Annual Session of the association, Jackson, May 10-12, 1960, published in Volume I, Number 7, JOURNAL MSMA, July 1960, were adopted.

REMARKS OF THE SPEAKER

Dr. B. B. O'Mara: Your Speaker and Vice Speaker join the President, President-elect, General Chairman, and other officials in welcoming members of this House of Delegates to the 93rd Annual Session. As your presiding officers, your Speaker and Vice Speaker pledge to serve you faithfully and impartially and we consider it our duty to enforce both rules and applicable By-Laws which you have enacted.

There are among you many members who are experienced through long years of service in this House of Delegates. Your Speaker believes that they will support and validate the admonitions he feels pertinent and timely for newer members:

(1) Attend all meetings of this House and be present before the several reference committees as your individual interests require.

(2) Avoid complex parliamentary tactics—keep the proceedings simple and direct. More often than not, complex motions only confuse transaction of business before the House. It has been well stated that the best parliamentary transaction is the simple transaction, understood by all and reflecting clearly the opinion of each delegate casting a vote.

(3) Be diligent and faithful in reading, studying, and familiarizing yourself with all reports and materials in your folders. For the most part, these represent a year or more of work on the part of those to whom you have entrusted your affairs. When you vote on a proposal without first having thoroughly considered it, then you shall have performed a disservice to those in your component medical society who depend upon you to represent their views and carry out their mandates.

As with the American Medical Association, most state medical associations, and other well-organized deliberative bodies, a system of reference committees is utilized for the purpose of debating business before the House of Delegates. Every state legislature and the Congress employ the same system of committees. When a matter is introduced, it is referred by the Speaker or Vice Speaker to the appropriate committee for hearing, debate, and recommendation to the whole body for disposition. As a safeguard for rights of the minority, a reference committee of this House of Delegates does not possess authority to "kill" business referred to it simply by taking no action. You are well aware that this can and does happen in committees of the Congress and legislature. All matters brought before this House and referred to reference committees will be returned to the House for final disposition by you, the voting delegates.

As reports and resolutions are presented, the Speaker or Vice Speaker will refer these to the appropriate reference committee. It is imperative that you understand that debate will be reserved until the committee meets at the appointed time and places published in the official program. This will permit those having an interest in the matter to express and discuss their views while conserving the time of those having other business or less direct concern with the issue under consideration.

An unbelievable amount of work has been compressed into the folders which lie before you. As

a matter of fact, this arrangement has been consummated for your convenience in reviewing the work of your officers, Board of Trustees, the several councils, and committees. Each and every word must be fairly, respectfully, and diligently considered. We are not here to see how quickly we can adjourn but how effectively, efficiently, and diligently we can discharge the responsibilities and trusts reposed in us by our colleagues.

Your Speaker and Vice Speaker will work without ceasing to bring these things to being and to give you reason to be proud of your participation in the 93rd Annual Session of your association.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

Dr. H. C. Ricks, Sr.: Your reference committee considered the remarks of the Speaker. Again, your committee is privileged to express the appreciation of all members of this House to the Speaker for his impartial exercise of leadership and for his wise counsel and guidance to members of this House. We express our regret that Dr. Howard A. Nelson, the Vice-Speaker, was unable to be present because of critical illness and death in his family and we express our appreciation to Dr. Lawrence W. Long who was willing to accept the assignment of Speaker Pro Tem and to serve during the present session of this House.

The report of the reference committee was unanimously adopted.

REPORT OF THE COUNCIL ON CONSTITUTION AND BY-LAWS

Dr. E. LeRoy Wilkins: Your Council on Constitution and By-Laws is elected by the House of Delegates pursuant to Section 6, Chapter IX, By-Laws of the association. It is the duty of this Council to study and review all suggested amendments and changes in the Constitution and By-Laws of the association, making recommendations deemed appropriate to the Board of Trustees and the House of Delegates.

There are neither pending amendments to the By-Laws nor proposed amendments to the Constitution lying on the table as unfinished business from the 92nd Annual Session. Your Council, however, is holding itself in readiness to consider any such amendments or changes which may properly be brought before this House of Delegates during the present annual session. The attention of all delegates is invited to the fact that the Council has announced a time and place for such hearings and this may be found by reference to the official program.

The report of the Council on Constitution and By-Laws was received for the information of the House of Delegates without action.

REPORT OF THE BOARD OF TRUSTEES

Dr. H. H. McClanahan, Jr.: The Board of Trustees is responsible for management and policy direction of all phases of association activity. In the discharge of this responsibility, formal meetings were conducted during May, September, and November of 1960, and in March and May, 1961. On other and intervening occasions, the Executive Committee of the Board acted on matters and staff conferences were conducted frequently. This annual report relates to those management and policy decisions deemed important to this House of Delegates and the membership.

Journal of the Mississippi State Medical Association

On December 1, 1960, Volume I, Number 12, JOURNAL MSMA was published, completing the first calendar year of your new JOURNAL's existence. To date, five issues of Volume II have been published. Volume I consisted of 1,520 pages of which 820 were advertising and 700 were editorial-scientific. This constituted a division of 54 per cent advertising and 46 per cent editorial-scientific, exceeding the goal of a 60-40 division usually sought in publications of this nature.

The JOURNAL is published under the supervision of the Board through a constitutional body, the Committee on Publications, consisting of the Editor, the two Associate Editors, and three others appointed in accordance with the By-Laws revision made by this House at the 92nd Annual Session in 1960. This committee has been diligent and responsive in the conduct of its assigned tasks.

The JOURNAL has been well received and is successful as a self-supporting project of your association. Both the Committee on Publications and your Board of Trustees feel that the services of the Ovid Bell Press have been excellent and the printing contract initially concluded for the calendar year 1960 has been renewed. Circulation has increased progressively and satisfactorily to slightly less than 2,200 monthly. Your JOURNAL is indexed officially by the American Medical Association and the National Library of Medicine.

The Board is pleased to announce that in competition with 670 magazine publications, your JOURNAL received Third Award in the 1960 evaluation and awards program of the International Council of Industrial Editors. In this connection, it is hoped that the House of Delegates will join the Board of Trustees in commending the Editors and Committee on Publications.

Committees of the Board

In addition to the Committee on Publications, there are two constitutional and one *ad hoc* committees of the Board of Trustees. A second *ad hoc* body, the Committee to Study State Income Tax,

concluded its studies and was discharged March 16, 1961. This committee was appointed August 6, 1958, to review practices by the State Tax Commission regarding professional deductions claimed by physicians in reporting state income tax. Although the committee exerted effort during a period of two and one-half years to obtain sufficient data to warrant conferences with state tax authorities, response was nominal and a review of information received did not, in the opinion of the committee, provide sufficient basis for further studies or action.

The Board approved a recommendation by the Grievance Committee, a constitutional body, to conduct studies of procedures used by the several component societies in acting upon grievances and to offer its services to any such society desiring assistance in strengthening its local processes for the prompt, impartial handling of grievances.

Other committees of the Board are the Advisory Committee to the Woman's Auxiliary and the State Medicare Review Board. The work of the former has been conducted on a continuous basis by means of liasion with officers and committees of our Auxiliary. The work of the latter is described elsewhere in this report.

The Councils on Budget and Finance, Medical Education, and the Editorial Council are elected by this House of Delegates but responsible to the Board. The Council on Budget and Finance reports separately to this House after conference with the Board. The Council on Medical Education continues to extend cooperation to the undergraduate and postgraduate education programs of the University of Mississippi School of Medicine. Additionally, the council and your Board approved a program to furnish essayists before scientific sections and component medical societies of the association in joint sponsorship with Merck Sharp and Dohme Research Laboratories, all such speakers to be selected by the groups before which they appear. The MSMA Postgraduate Education Speakers Bureau has been maintained as a continuing service of the association in joint sponsorship with the University and is profitably utilized by component medical societies in presenting scientific programs by Mississippi essayists at the local level.

Medicare

The Medicare program is in its fifth year under association policy management and control through a contract with the Department of Defense. Operationally, program experience for 1960 was comparable to that during 1959 except that prior restrictions upon services which may be rendered inpatients were removed. Of slightly less than 4,000 claims received, 94 per cent were ultimately payable. Only one claim out of 20 required formal review by the State Medicare Review Board, a rate of only five per cent. This is a tribute to Mississippi physicians rendering care to dependents of uniformed services personnel.

A recent study by the Review Board of 500 consecutive claims was made to classify and identify reasons why some claims must be returned to physicians for additional information before payment can be made. The findings demonstrate only oversight in claims preparation, in many instances, apparently by clerical personnel. Again, the Board of Trustees commends the State Medicare Review Board, the members of which serve without compensation and who are called upon frequently for meetings and consultations.

Fluoridation of Public Water Supplies

In December 1957, the American Medical Association endorsed fluoridation of public water supplies in amounts not to exceed one part per million and adopted an extensive scientific report, the thesis of which stated that fluoridation was not harmful in this proportion. At the request of the Mississippi State Board of Health, through the Supervisor of Public Health Dentistry, your Board considered this policy which is supported by the State Board of Health and adopted a position of approval to parallel that of the American Medical Association.

Other Activities of the Board

The Board of Trustees worked closely with Mississippi delegates to the 1961 White House Conference on Aging. Eight of the 24 delegates appointed by the Governor represented your association and your chairman of the Board of Trustees was asked to serve as chairman of this section of the delegation. In related areas, your Board has been represented at national legislative conferences of the AMA, in conversations with state government officials on matters of medical interest, and in various other phases of association activity. Continuous liaison and coordinating relations are maintained among the Board, the general officers of the association, the various councils and committees, and the executive staff.

The Board monitors and manages the several group insurance programs sponsored by the association with the Continental Casualty Company and the Mississippi Hospital and Medical Service. The Board holds itself in readiness to review and assist in medicolegal matters concerning members of the association and regularly functions in this capacity.

During the year, the following have served in elected capacities on the Board of Trustees as required by the By-Laws: H. H. McClanahan, Jr., Columbus, chairman; John B. Howell, Jr., Canton, vice chairman; and C. D. Taylor, Jr., Pass Christian, secretary. The Board has endeavored to discharge all assigned duties diligently and responsibly. Each member wishes most earnestly to provide dynamic management for continued progress and growth of our association while remaining completely responsive to the desires of the House of Delegates and the membership.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

Dr. H. C. Ricks, Sr.: Your reference committee considered the report of the Board of Trustees. We join the Board of Trustees in commending the Editors and Committee on Publications for the honors and acclaims which our JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION has earned.

We endorse and approve the work of the Board of Trustees, the various actions which the Board has taken, and the positions assumed in the management of the affairs of our association.

The report of the reference committee was unanimously adopted.

SUPPLEMENTAL REPORT OF THE BOARD OF TRUSTEES

Dr. H. H. McClanahan, Jr.: After H.R. 4700, the Forand bill, was defeated 17 to eight in the House Committee on Ways and Means during the Second Session of the 86th Congress, the chairman of the committee, Representative Wilbur Mills (D., Ark.) introduced H.R. 12580 which became the basic framework for Public Law 86-778, adopted after conference with the Senate on August 29, 1960, and signed into law by the President on September 13 to become effective October 1, 1960.

The medical profession is concerned with Title VI of this law which revises and amends existing laws to permit an increase of federal funds to states for vendor medical payments to (1) recipients of Old Age Assistance (OAA) and (2) for those individuals aged 65 or over who are not receiving OAA but whose incomes and resources, as determined by the state, are insufficient at one time or another to permit purchase of necessary medical services. This latter provision is known as Medical Assistance for the Aged (MAA) and is the only new concept enacted in this title.

The legislation was enacted by the Congress with the support of the American Medical Association which bases its position on five reasons why this law merits public support:

(1) The Kerr-Mills law provides legislation under which it is possible, for the first time, to help every aged American who needs help to pay for health care. Its benefits, based on need and local determination, are much broader than under proposed Forand-type or King-Anderson legislation.

(2) The program is voluntary, not compulsory. It will supplement, not supplant, individual voluntary health insurance or prepayment.

(3) It will be administered on a local basis. The Kerr-Mills law leaves matters up to the states by giving them the right to set up their own programs in their own way, on the logical theory that each state knows its own particular problems better than the federal government does.

(4) The new law is economical. Local administration, local choice of scope of benefits and method of payment, local definition and determination of eligibility—all these mean that our tax dollars will be spent to the best advantage. The use of this approach not only guarantees that we will be helping those who need help but that we will not be wasting tax dollars on help for those who are perfectly willing and able to take care of their own health care costs.

(5) The quality of medical care under such a plan will be infinitely superior to that possible under a Forand-type or King-Anderson approach. Under the new law, any type of care can be provided if the state determines the need for it. Under H.R. 4222 and S. 909, the King-Anderson proposals, only hospitalization, some nursing home care, and other minimum services would be provided at greatly inflated costs under new and greater Social Security taxes upon the working population. The Kerr-Mills law allows adequate supervision of the program by physicians and places no restraints upon the doctor in the exercise of his professional judgment. The medical profession's basic policy has always been to insure that the needy receive the same high quality of medical care as anyone else in the community. Under the Kerr-Mills law, this can and will be accomplished, whereas it could not be under the restrictions imposed by King-Anderson legislation.

Soon after the Kerr-Mills law became effective, the Board of Trustees conducted a special meeting on this subject, conferring with the general officers, AMA delegates and alternate delegates, the Committee on Aging, and invited conferees able to contribute to these deliberations. Immediately prior to this meeting, the State Board of Health considered the new law with invited conferees from your association present.

For many years, state medical association policy with respect to federal participation in medical

care plans for the indigent was adopted without reference to public assistance programs, with the single recorded exception of an action by the Board of Trustees in connection with the separate matching fund amendments enacted by the Congress in 1956. This provision in the law was repealed in 1958. Invariably, proposals to which such policy applied contained four common and recurring characteristics, as were the cases with Wagner-Murray-Dingell, Forand, and now King-Anderson:

(1) Universal compulsion.

(2) Total federal funding from federally imposed taxes.

(3) No local control.

(4) Benefit eligibility without reference to need, resources, or means (no means test).

Obviously, none of the foregoing applies to the Kerr-Mills law.

Reporting in 1957 to this House of Delegates, the Council on Medical Service recommended a key policy which was unanimously adopted. This policy, stated in part as pertains to medical care plans, appears important:

"It is essentially undesirable for professional services to be purveyed by hospitals, corporations, and/or political subdivisions where fees for services are involved either from the patient or a responsible third party *except for statutorily established and medically accepted programs of government which are not disapproved by the association.*"—Transactions of the House of Delegates, 1957:27, 29. (Italics supplied.)

Your Board of Trustees has interpreted this policy as applying to (1) VA care of service-connected disabilities, (2) the workmen's compensation program, (3) Medicare, and (4) patient care programs in governmental tuberculosis and mental hospitals, none of which has been disapproved by the association.

The Board has more recently stated that ". . . personal medical care is primarily the responsibility of the individual. When he is unable to provide this care for himself, the responsibility should properly pass to his family, the community, the county, the state, and only when all these fail, to the federal government, in the above order. The determination of medical need should be made by a physician and the determination of eligibility should be made at the local level with local administration and control. The principle of freedom of choice should be preserved. The use of tax funds under the above conditions to pay for such care, whether through the purchase of health insurance or by direct payment, provided local option is assured, is inherent in this concept."

The Board of Trustees believes that a firm policy position with respect to Public Law 86-778 should be enunciated in the light of the foregoing policy which has been evolved and adopted by your association over a period of years. It is, therefore, recommended that this House of Delegates approve and support Public Law 86-778, the Kerr-Mills program.

Your Board of Trustees is in complete accord that programs under the Kerr-Mills law should be medically oriented and we do not approve the present welfare-oriented program which has been implemented on an interim basis. Your Board, in making this utterance, supports the principle of Public Law 86-778 rather than the program which has been implemented at the present time.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

Dr. H. C. Ricks, Sr.: Your reference committee considered the supplemental report of the Board of Trustees. This report deals with the Kerr-Mills program, Public Law 86-778. Your reference committee points out that the American Medical Association supports this program as do most other state medical associations and we feel that the position of the Board is sound and logical. We approve the Board's non-support of the present welfare oriented program in Mississippi. We note that this interim program provides a maximum of 15 days hospitalization for an acute condition. Your reference committee recommends that the report be adopted.

In discussion, Dr. R. J. Moorhead recommended that emphasis be accorded the statement of the Board of Trustees that the present welfare-oriented program was not approved and that of the reference committee as to non-support of the present program.

The report of the reference committee was adopted as amended.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS BUSINESS

Dr. Stanley A. Hill: Your reference committee considered the supplemental report of the Board of Trustees, subject "Public Law 86-778, the Kerr-Mills Program." Extensive discussion before the reference committee brought out the fact that this law was enacted with the support of the American Medical Association and is now supported by a majority if not virtually all state medical associations. Our State Board of Health has expressed an interest in this program believing that any services made available to Old Age Assistance recipients should be under medical sponsorship.

One member of the association, appearing before the committee, opposed this program as a potentially enormous federal project but the majority of discussion may be summarized by simply pointing out that most members feel that since this legislation has been enacted, it should be under medical supervision and control to a maximum possible extent. Your reference committee, therefore, feels that any such program implemented in Mississippi should be medically oriented and we concur in the statement of the Board of Trustees to this effect. Your committee recommends adoption of this report.

The report of the reference committee was unanimously adopted.

SUPPLEMENTAL REPORT OF THE BOARD OF TRUSTEES

Dr. H. H. McClanahan, Jr.: Your Board of Trustees has examined a proposal by the St. Paul Fire and Marine Insurance Company to offer a professional liability insurance program to the association. An *ad hoc* committee of the Board of Trustees conducted inquiries in this connection and this report, recommending approval of the program, has been adopted by the Board.

It is, therefore, recommended that the House of Delegates approve this program.

REPORT OF THE COMMITTEE ON PROFESSIONAL LIABILITY INSURANCE

At the March 16, 1961, meeting of the Board of Trustees, representatives of the St. Paul Fire and Marine Insurance Company made a presentation to the Board offering to write professional liability insurance for the membership on an individual basis but with association sanction and endorsement. The Board, after hearing the presentation, directed that an *ad hoc* committee explore the matter further, reporting to the Board on May 8, 1961. A meeting was conducted by the committee on April 21 with four representatives of the company to include state manager, a special agent, and two local agents. The committee is composed of Drs. H. H. McClanahan, Jr., and S. Lamar Bailey.

Following the March 16 presentation, your committee caused inquiries on the St. Paul plan to be made to state medical associations in the District of Columbia, Georgia, Maryland, Minnesota, North Carolina, Oklahoma, South Carolina, and Virginia. Replies were received from seven of these eight associations, six in time for consideration at the April 21 committee meeting. All reported that the program was satisfactory, that participation was high, that favorable rate experience had resulted in a lowering of premiums in varying degrees, and that the St. Paul Company had kept faith with its agreements and the physicians. Your committee reminds the Board that the St. Paul professional liability contract differs from the standard form of the National Bureau of Casualty Underwriters. It has fewer exclusions and is vigorously represented by the company as being superior to the National Bureau form. Should this proposal be adopted, however, it will be necessary to rescind a policy adopted by the House of Delegates at the 90th Annual Session, May 13-15, 1958, which states that "All such coverage should be written in the standard form of the National Bureau of Casualty Underwriters with all settlement options accruing to the assured physician." The St. Paul contract, however, permits full settlement prerogatives to the assured physician.

Under this proposal, there would be no association group contract but a close working relationship between the association and the carrier would be established. Contracts would be sold through local St. Paul agents to physician-members as individuals. A claims review mechanism would be devised to assure the contract holder maximum service and the benefit of dependable legal and medical advice when litigation had been threatened or actually instituted.

The chief benefits of the St. Paul proposal appear as (1) advantages in coverage evidenced by fewer exclusions and (2) the probability of a premium rate reduction within 36 months or sooner.

Your committee recommends that the St. Paul proposal be accepted.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

Dr. H. C. Ricks, Sr.: Your reference committee considered the supplemental report of the Board of Trustees having to do with the presentation of the St. Paul Fire and Marine Insurance Company in connection with professional liability insurance. We agree that this program has merit and we recommend its adoption but not to the exclusion of other professional liability contracts which have been demonstrated as effective and trustworthy.

The report of the reference committee was unanimously adopted.

SUPPLEMENTAL REPORT OF THE BOARD OF TRUSTEES

Dr. H. H. McClanahan, Jr.: Your Board of Trustees has considered a proposal for an expanded Council on Legislation which shall increase the present membership from three to nine members, thereby representing all association districts.

Your Board, therefore, recommends that Section 7, Chapter IX, By-Laws of the association be revised to read as follows:

"The Council on Legislation shall consist of nine members, one from each association district, elected by the House of Delegates for terms of three years each which are so arranged that three members are elected annually. This Council shall analyze proposed legislation, recommending to the Board of Trustees courses of action for securing laws in the interests of public health, scientific medicine, as well as medical practice. It shall study and report the need for new and remedial legislation designed to serve the best interests of the state and nation. This Council shall be responsible to the Board of Trustees."

The Board of Trustees recommends that this amendment be enacted.

REPORT OF THE COUNCIL ON CONSTITUTION AND BY-LAWS

Dr. E. LeRoy Wilkins: Your Council considered a supplemental report of the Board of Trustees recommending enlargement of the Council on Legislation from three to nine members, thereby representing all association districts. We concur in this proposal and recommend its adoption.

In discussion, Dr. William E. Lotterhos moved that the report be amended to provide that the additional members of the Council on Legislation be appointed by the Board of Trustees initially and the motion was seconded by Dr. George E. Twente. On the question, the amendment was adopted and the report of the council was adopted as amended.

REPORT OF THE SECRETARY-TREASURER

Dr. William E. Lotterhos: Your Secretary-Treasurer has completed three years service in his present constitutional capacity but assumed the duties transferred from the former office of Treasurer as required by the Constitution and By-Laws only at the beginning of the 1960-61 association year, the period being reported.

On December 31, 1960, there were 1,317 members of the association in good standing as opposed to 1,310 in the preceding year. Our 1960 membership included 1,135 paid members, 116 Emeritus members, 66 members exempt for purposes other than Emeritus. As of May 1, 1961, there were 1,290 members in good standing for the current year. Among these 1,104 are paid members, 115 are Emeritus, and 71 are exempt from dues in categories other than Emeritus. From among these 71 members, 43 are exempt by reason of residency training, 8 for military service, 11 in the degree of Associate membership who do pay a service fee of $15, 6 as Scientific members, and 3 for reasons of undue hardship, all because of extended illness and inability to practice.

It is important to appreciate that totals reported are adjusted to include only living members actually in Mississippi or those properly on the rolls of the association even though located out-of-state. All deaths and permanent removals have thus been subtracted which is to point out that actual membership was numerically greater at various times during the year than the adjusted totals indicate. A summary is attached.

The association congratulates nine of the 16 component medical societies for having secured 100 per cent of their renewable 1960 membership as of this reporting date: Amite-Wilkinson County, Claiborne County, Clarksdale and Six Counties, DeSoto County, Homochitto Valley, North Mississippi, Pearl River County, Tri-County, and West Mississippi Medical Societies.

In accordance with accepted custom and practice, your Secretary-Treasurer submits a condensed statement of your association's financial condition as of April 30, 1961, as an attachment to this report. The report of audit was rendered to the Board of Trustees by the independent certified public accountant based upon detailed examination of all books and records for 1960, the most recent fiscal year. The Council on Budget and Finance recently reviewed all reports and records to which reference has been made.

Your association has again enjoyed modest fiscal growth and continued financial stability. Of importance is the scheduled reduction of long term liabilities. Admitted assets are slightly over $218,000, representing a net gain over the preceding year. Net worth varies from month to month because of accounts receivable but a growth trend is established in this connection. Cash requirements of the association are greater since inception of your JOURNAL MSMA which involves substantial sums.

In all respects, your association is stable and solvent, meeting all usual tests and criteria in these connections. The Board of Trustees has managed our affairs wisely and soundly. Reports of audit and a study of records indicate proper accounting procedures, adequate management in the Central Office, and proper handling of all funds.

As your Secretary-Treasurer, I wish to commend the entire headquarters staff for their untiring efforts in making this position an easy office to occupy. Without their assistance, I should be unable to carry out these duties and responsibilities.

MISSISSIPPI STATE MEDICAL ASSOCIATION

Condensed Statement of Financial Condition, April 30, 1961

ASSETS

Current Assets		
General Fund		
Cash on Deposit	$61,016.57	
Due from Department of Defense, Medicare Administration	4,435.56	
Due from Advertisers, JMSMA	5,887.52	
Other JMSMA Receivables	193.78	
		$ 71,533.43
Medicare		
Cash on Deposit, Professional Account	28,671.93	
Due from Department of Defense, Professional Account	16,328.07	
		45,000
Fixed Assets		
Land	13,605.30	
Building and Equipment, Less Depreciation	88,221.25	
		101,826.55
Total Admitted Assets		$218,359.98

LIABILITIES AND NET WORTH

Current Liabilities		
Amortization, Building, Current Year		$ 2,643.11
Long Term Liabilities		
Building	$45,547.70	
Advance Medicare Capitalization	45,000.00	
		90,547.70
Deferred Income		
Advance Payments, 93rd Annual Session		6,900.00
Net Worth		
Unappropriated Net Worth		118,269.17
Total Liabilities and Net Worth		$218,359.98

During the past association year, your Secretary-Treasurer has served as an *ex officio* member of the nine Councils and all committees as required by the By-Laws. Additionally, he has served as chairman of the recently discharged Committee to Study State Income Tax, chairman of the Committee on Relations Between Physical Therapy and Medicine, chairman of the Council on Scientific Assembly, chairman of the Council on Legislation, and member of the Committee on Publications. These several duties required attendance and participation in about 50 meetings during the year. Your Secretary-Treasurer is grateful for the cooperation and support received in the discharge of these responsibilities.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

Dr. H. C. Ricks, Sr.: Your reference committee considered the report of the Secretary-Treasurer. Without question, this constitutional officer has devoted himself to his assigned duties with diligence and vigor. We commend his activities and express our appreciation for his splendid report which we approve.

The report of the reference committee was unanimously adopted.

REPORT OF THE COUNCIL ON BUDGET AND FINANCE

Dr. Charles L. Neill: Your Council has carefully examined operation of the association for the 1960-61 association year with respect to all fiscal activity. The report of the Treasurer has been compared with the report of audit performed by the independent Certified Public Accountant who is responsible to the Board of Trustees. The findings are to the satisfaction of your Council. Prior to this annual session, your Council met with all members present and examined pertinent data with respect to fiscal operation of the association. We have determined that all accounts, receipts, and disbursements are regular and authorized.

Your Council has considered the 1961-62 budget for operation of your association. We have conferred with the Board of Trustees who concur in this connection. Each item of the budget has been evaluated carefully as to necessity, adequacy, and propriety. We recommend the total budget of $731,550, representing a decrease of slightly less than $7,000 over the preceding association year. This total includes the following sums for purposes stated: (1) For general operation of all departments and activities of the association including all production aspects of the JOURNAL and all administrative costs, $94,487.60; (2) for building amortization, utilities, maintenance, taxes, and associated expenditures, $11,471.88; and (3) for professional aspects of the Medicare program, $600,000. We recommend adoption of this amount as being a realistic minimum for continued effective operation of your association.

Our independent Certified Public Accountant surveyed all insurance owned by the association and we have reviewed his report. It has been de-

termined that the coverage provided under direction of the Board of Trustees is adequate. Suitable safeguards for disbursement procedures as well as for important papers, fees, and other documents of value and record have been provided.

The report of the Council was unanimously adopted.

REPORT OF THE EXECUTIVE SECRETARY

Mr. Rowland B. Kennedy: Your Executive Secretary is responsible for conducting the administrative affairs of the association and for management of the Central Office. In the discharge of these duties during the 1960-61 association year, close and continuous liaison has been maintained with the general officers, Board of Trustees, the nine councils, several committees, and component society officers. Staff services to these groups include records maintenance, research, studies, writing, and publications production. Fiscal activities of your Central Office encompass management of general fund accounting and administration, business management of your JOURNAL MSMA, and administration of the Medicare program, all under policy supervision of appropriate constitutional officers and formally designated bodies.

From an administrative viewpoint, the greatest single increase in association activity during the past year was in the area of council and committee work. It was the opportunity of your executive staff to provide more services to these groups than in any previous year. Your JOURNAL completed its first year of existence during 1960, demonstrating satisfactory growth in circulation and financial stability. Progressively greater production economies are being achieved.

Because the Board of Trustees and this House of Delegates have provided wisely and sufficiently for the administrative requirements of your association with an efficient headquarters building and modern business machines, it has been possible to expand services substantially, including production, business management, and circulation control of your new JOURNAL, over a four year period without numerical increase in the executive staff. The recent addition of the Assistant Executive Secretary, authorized by the Board of Trustees, has been a key factor in this increased service capability. To each member of the staff, your Executive Secretary expresses appreciation for competency and productivity.

For the 11th consecutive year, there has been a modest increase in your assets with the desirable concomitant of a decrease in long term liabilities, resulting in some gain in net worth. Under policy direction of the Board of Trustees, effort is continuously exerted to manage fiscal planning and financial affairs conservatively while seeking efficiency and economy.

Your Executive Secretary is grateful for the opportunity to share in the work of the association and the pledge, on behalf of each member of the executive staff, to remain responsive, energetic, and loyal to the association is renewed and reaffirmed.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

Dr. H. C. Ricks, Sr.: Your reference committee considered the report of the Executive Secretary. During discussions in the reference committee, the fact that the executive staff is rendering greater service to the various councils and committees was appreciated and we commend the entire staff for their diligence and loyalty to the association. We express our appreciation to the Board of Trustees for having provided for adequate and suitable office facilities for our staff.

The report of the reference committee was unanimously adopted.

REPORT OF THE DELEGATES TO AMA

Dr. John F. Lucas: As your accredited delegate to the American Medical Association, it is my privilege to present a condensed summary report of the 109th Annual Session, Miami Beach, June 13-17, 1960. The House of Delegates was in session four days including those reserved for reference committee hearings. Total registration was slightly more than 20,000 with about 8,800 physicians. The Scientific Assembly was outstanding in all respects, presenting some 500 essays and nearly 700 exhibits. Dr. E. Vincent Askey, Los Angeles, was inaugurated 114th President during impressive ceremonies June 14.

Principal issues before the House of Delegates included health care for the aging; policies on drugs and drug distribution; programs of occupational health; relations with voluntary health agencies and other allied health groups; and a number of miscellaneous items. The House of Delegates adopted a key policy affirming the belief that personal medical care is primarily the responsibility of the individual which properly passes through the family, community, county, state, and only when all these fail, to the federal government and then only in conjunction with other levels of government in that order, should there be a progressive inability to provide care at the levels enumerated. This had the effect of providing the basic policy for endorsement of the Kerr-Mills principle

which is supported by the American Medical Association.

Except where it is unavoidable because of geographic isolation, the delegates agreed that the unorthodox practice of supplying prescription drugs by mail order is not in the best interest of the patient. Additionally, the Board of Trustees was directed to initiate studies with respect to the relationship of pharmacy to medicine and the public, submitting an objective appraisal of this relationship by June, 1961. These studies are aimed at assuring a successful future in pharmaceutical research and development as an indispensable adjutant to progress in scientific therapy.

The House of Delegates approved a revision of the 1957 policy statement, "Scope, Objectives, and Functions of Occupation Health Program." There are, however, no alterations in policy with respect to such programs or ethical relationships but additional emphasis have been placed upon preventive concepts, greater exercise of medical leadership, new and increased emphasis on rehabilitation of the occupational disabled, programs of immunization for industrial workers, and new activities in industrial hygiene.

The final report of the Committee to Study the Relationships of Medicine with Allied Health Professions and Services was approved and commended as monumental work which, indeed, it is. The report urges new and increased liaison with allied sciences, allied health groups, educational groups, exchange of information through various scientific media, and work with professional and technical personnel. Basic policies on appointment and function of medical advisory committees at the chapter level for the National Foundation and additional conferences with national leaders of this group were acted upon.

Miscellaneous actions included strong reaffirmation of the Blue Shield concept, approval of a contingent appointment of not more than six months additional qualifying time for foreign medical graduates, authorization of a second national congress on prepaid health insurance, and establishment of a commission on the cost of medical care to be headed by Dr. Louis M. Orr, Orlando, Florida. Again, the House reaffirmed its opposition to compulsory inclusion of physicians under Title II of Social Security and continued its opposition to Forand-type legislative proposals.

Dr. Leonard W. Larson, Bismarck, North Dakota, was named President-elect and the 1960 Distinguished Service Award went to Dr. Charles A. Doan, Dean of the Ohio State University College of Medicine. Dr. Hermann N. Burian, Iowa City, received the Hektoen Gold Medal for his exhibit on chamber angle anomalies in the development of glaucoma.

Attendance from Mississippi was excellent and your delegates were grateful for the presence of the Honorable Ross R. Barnett, Governor of Mississippi, who addressed the 1960 Conference of Presidents and Other Officers of State Medical Associations.

Dr. J. P. Culpepper, Jr.: As your accredited delegate to the American Medical Association, it is my privilege to present a condensed summary report of the 14th Clinical Session, Washington, D. C., November 28-December 1, 1960. The House of Delegates was in session three days including one reserved for reference committee hearings. Total registration was slightly in excess of 8,000, including almost 4,000 physicians.

Major issues before the House of Delegates were an AMA-sponsored scholarship and loan program for medical students, status of foreign medical graduates, an AMA membership dues increase, expansion of voluntary health insurance, care for the aging, and poliomyelitis vaccine.

The scholarship and loan program proposed by a special study committee of the Council on Medical Education and Hospitals was approved and it was stated that the proposed endeavor will provide concrete evidence of AMA's sincere desire to attract increasing numbers of well qualified young people to enlarge the ranks of our profession. The problem of foreign medical graduates was again reviewed and its various aspects debated before the reference committee. The House approved a policy of permitting training institutions to develop special educational programs for such graduates who have not yet been certified by the Educational Council for Foreign Medical Graduates. Such programs would be limited to education and would divorce the foreign physician from any responsibility for patient care. Such physicians would be permitted to participate only through June 30, 1961, with the approval of the Department of State so that their exchange visas will not be withdrawn before that time. This, in effect, stated that the American Medical Association will not intervene in the withdrawal of visas for those foreign physicians unable to qualify under ECFMG standards.

The House of Delegates received a proposal from the Board of Trustees for a dues increase to be recommended at the June, 1961 Annual Session. It has been stated that the increase will not be less than $10 nor more than $25 annually to become effective January 1, 1962. The reference committee suggested that the dues be increased $20 to a total of $45 per year, such increase to be implemented over a period of two years, $10

on January 1, 1962, and $10 additionally on January 1, 1963.

It was further suggested that these funds be used to inaugurate or expand a number of programs including (1) financial assistance to medical students, (2) continuing education for practicing physicians, (3) health education for the public at large, (4) medical research, and (5) expansion by the Communications Division of its program of faithfully portraying the American Medical Association to the public. Your delegates will be responsive to any instructions in this connection received from this House.

The House voted to direct the Board of Trustees and Council on Medical Service to assume leadership in consolidating efforts of the AMA with those of Blue Shield, the American Hospital Association, and the Blue Cross Association in maximum development of the voluntary, non-profit prepayment concept and to assume similar leadership in coordinating efforts of private insurance carriers through conferences with their national organization and finally, where feasible, to exert efforts to cooperate with representatives of other types of medical care plans, other professional groups, and representatives of industry, labor, and the public. The House affirmed its support of the Kerr-Mills program and reiterated its opposition to any type of legislation making use of the OASDI Social Security mechanism for medical care to the aged. Although the King-Anderson bills, H.R.4222 and S.909 were introduced subsequent to the Washington meeting, this policy applies to this legislation now before the Congress.

The House adopted a special report urging widest possible use of the Salk polio vaccine in view of the fact that oral polio vaccine will not be generally available in sufficient quantity during 1961 for any large scale immunizing effort. Further studies with respect to the oral vaccine were authorized.

In miscellaneous actions, the House approved a continuing study of the trend toward locating physicians offices in or adjacent to hospitals, approved the set of guides relating to drug expenditures for welfare program recipients, requested the Board of Trustees to study the question of blood replacement responsibility and the matter of establishing health insurance payment for assistants at surgical procedures. The Board of Trustees was urged to make every effort to reduce the number of physicians who are non-dues-paying members, meaning those with approved exemptions, and the House considered a study report on the relationships of physicians not in private practice with medical organization. Information was received that the Board of Trustees will present a proposed retirement and disability insurance program for AMA members at the June, 1961, New York meeting.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

Dr. H. C. Ricks, Sr.: Your reference committee considered the reports of the delegates to the American Medical Association. Discussion before our committee disclosed great interest in the proposed dues increase for the American Medical Association. Your committee feels that the increase in dues should be supported, recognizing the necessity for additional funds to carry out the mission of our parent medical body. We feel, however, that the program of the AMA Council on Medical Education and Hospitals with respect to scholarship grants and loans should be restricted to loans only. Your committee, therefore, recommends that the delegates to the American Medical Association be instructed to support the increase in dues but not grants for the purposes of providing tuition or other costs for medical education. Further, your committee heard discussion with respect to a proposal to place the AMA Council on Medical Education and Hospitals under the Board of Trustees. This Council is now elected by the House of Delegates. We believe that this method of selection should be continued and we feel that at least five members of this Council should be physicians in private practice. We further recommend that our delegates support such action.

Your reference committee commends the delegates to the American Medical Association and the alternate delegates who have represented our association so ably.

The report of the reference committee was unanimously adopted.

ANNOUNCEMENT OF NOMINATING COMMITTEE

Following a recess for caucuses by association district, the Nominating Committee was announced:

Byron A. Mayo, Drew, District 1
Robert E. Shands, New Albany, District 2
M. Q. Ewing, Amory, District 3
S. Lamar Bailey, Kosciusko, District 4
J. A. K. Birchett, Vicksburg, District 5
Guy T. Vise, Meridian, District 6
Andrew J. Carrol, Jr., Hattiesburg, District 7
O. G. Eubanks, Crystal Springs, District 8
C. D. Taylor, Jr., Pass Christian, District 9

Dr. Bailey was designated chairman by a vote of the committee which conducted open sessions on May 10, 1961.

OPEN SESSION OF THE HOUSE OF DELEGATES

The House of Delegates entered upon open session during which distinguished guests present were introduced by the Speaker. Dr. Leonard W. Larson, Bismarck, North Dakota, President-elect of the American Medical Association, delivered the principal address of the 93rd Annual Session.

ADDRESS OF THE PRESIDENT

Dr. G. Swink Hicks: Twenty-two living past presidents of the Mississippi State Medical Association will very likely state that their respective terms of service did not *ergo* make of them medical oracles and professional prophets. Certainly, this is my observation. Each will, I believe, say that this office, the highest gift one's colleagues are able to bestow, offers unparalleled opportunity to view our profession in its broadest perspective.

Today, the art and science of medicine and the physician himself are in a crucial, ironic dilemma. On the one hand, the clinician, the researcher, the drug maker, and their colleagues on the health team have enjoyed success beyond expectation in the struggle against disease and injury. Within the memory of many members of this House of Delegates, the human lifespan has increased half again and once-common causes of death are now dull, didactic quantities of medical history.

On the other hand, a legislative incursion sponsored and nurtured by liberal political elements, sincere but misguided individuals, some dedicated by design to hostility toward private endeavor, and some fanatics, threatens not merely those in the healing art but the very fabric of America with a governmental and economic philosophy foreign to us.

Somewhere in between the extremes of this dilemma are the doctor and his patient. Between them, changes in their relationship are occurring, too. Whether we of medicine have assisted or resisted this series of events or not is now mostly academic. For example, the past quarter of a century has seen a revolution in the economics of medicine.

It was inevitable that more and better capacity for helping more people to live longer is a costly process. Almost concurrently, actuarial and prepayment principles were brought into the health care picture. Only slightly later, the issue of federal medical care became a permanent part of the scene. One question seems to have been resolved: It is no longer a question of how the bill shall be paid but only one of who is going to pay it.

Through our *Principles of Medical Ethics,* we voluntarily proclaim that economic considerations are secondary but we cannot deny that when these considerations are such as to influence the climate within which we must practice, then such questions must have our urgent attention. For this reason, these socioeconomic developments have made it necessary to create organizational mechanisms with which to study and inform ourselves on these critical issues and to suggest courses of action which we must follow in order to maintain scientific excellence. Some of us are in the race and some are not.

Never before has medicine stood at a higher pinnacle of scientific success but never before have we found ourselves in an otherwise more critical position. Never before have we had greater reason to act in concert and with unity of purpose. Our adversaries can afford to wait us out because time simply isn't on our side. And we can little afford tactical errors, either.

One such error is to overestimate our strength on the legislative scene. Actually, medicine's leadership will not make this error but those who equate the profession's national influence with that of the physician in his own community are on dangerous ground. There are 26 million of them, meaning the labor unions from whom our principal opposition comes, and only 178,000 of us.

On the other hand, we can understate our case, failing to recognize that with unity we move from a position of strength. But we move from this position only when we are unified, when we act with reason, and when we consolidate rather than disrupt our own ranks. The facts are on our side but they will be of no benefit to us if we fail to use them intelligently.

The American people are no longer uninformed about health care, thanks to our own effort in broad health education. The public is determined to live out its three score and ten and if we fail to do everything reasonable to assist in the realization of this aspiration, then the public will, without question, vote itself a means. This alternative should be familiar to all of us because it has carried such labels as Wagner-Murray-Dingell, Forand, King and Anderson.

We have a solid stake in making insurance and prepayment work and we can do so without sacrificing the prerogatives we feel are necessary to furnishing the best medical care for all. We have a stake in realistic programs of medical care for the indigent. Our joy over the resolution of one grievance of a patient against a physician ought to

equal that felt over the ninety and nine who have no grievance.

In recent weeks, many physicians have marveled at Dr. Edward Annis of Miami whose television debates with Mr. Walter Reuther earned new friends for medicine. Dr. Annis points out that the material he uses in his speeches and debates is the same sent by the AMA and state associations to every member. If you are not now using these facts, how do you propose to do your part in the fight?

In Mississippi, we have been spared most of the medical socioeconomic heartache found in most other states. Mississippi physicians have had little opportunity to come to grasps with union-sponsored health care plans, closed panel programs, and the like. We should take full advantage of this unique margin and prepare to maintain the practice climate which enables us to give our best to our patients. One way *not* to do this is to fall asunder among ourselves or merely to find ourselves uninformed.

Above all, we must want to win over the forces which would alter our traditional practice patterns but we must want to win for our patients, not solely for ourselves.

Soon, I shall pass the responsibilities of office on to my successor and I shall do so with confidence in his leadership ability. I return to you that which you entrusted to me, reminding you that it was the team—not the quarterback alone—who made the touchdowns possible.

For your support, wise counsel, cooperation, and courtesies to me and my family, I can only say that I am forever in your debt with sincere gratitude.

Our association, more today than ever before, is a viable, flexible, influential, and vigorous quantity. Six years ago, Dr. Lamar Bailey told you that ". . . you can't argue with success, so get the habit. . . ." That's equally true today and you are successful.

Where I offered a note of caution, I did so only to seek your unified effort to maintain the pace. We cannot—and shall not—do less.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

Dr. H. C. Ricks, Sr.: Your committee considered the address of the President. Your committee feels that certain sections of this report should be emphasized and in this connection, we invite the attention of this House of Delegates to one particularly piercing and pertinent paragraph: "Never before has medicine stood at a higher pinnacle of scientific success but never before have we found ourselves in an otherwise more critical position. Never before have we had greater reason to act in concert and with unity of purpose. Our adversaries can afford to wait us out because time simply isn't on our side. And we can little afford tactical errors, either."

Mr. Speaker, we commend the President not only for this expression but also for his vigorous and dedicated administration and for his diligence in his attention to the duties of the high office which he has so well discharged. Your committee feels that Dr. Hicks will be long remembered as one of the outstanding presidents of the Mississippi State Medical Association.

The report of the reference committee was unanimously adopted.

REPORT OF THE COMMITTEE ON AMERICAN MEDICAL EDUCATION FOUNDATION

Dr. W. E. Caldwell: Your AMEF Committee is composed of one member from each component medical society. The members of this committee have been untiring in their efforts to educate the members of the MSMA to the value of regular contributions to medical education. Our beginning was small, but each year contributions have been more generous and numerous. The ladies Auxiliary of MSMA have also contributed and worked effectively for AMEF.

This year your committee joined with our own medical school in a joint AMEF-University of Mississippi appeal. The officials of the University and the Alumni Association have cooperated and accelerated the giving to medical education beyond measure. We of the MSMA thank them for their cooperation in this program.

The AMEF has asked the constituent state associations of the American Medical Association to cooperate in presentation of AMEF grants to medical schools in such jurisdictions this year and hereafter. In the past, the grants were mailed directly to the schools. We are pleased to make this presentation before the 1961 House of Delegates. The amount to be presented to the University of Mississippi Medical School is $8,654.47, of which $5,207.32 represents general grants and $3,447.15 designated grants.

After presenting the report, Dr. Caldwell invited Dr. Alton Bryant, Vice Chancellor, University of Mississippi, representing the school of medicine, to the rostrum and the check was presented. Dr. Bryant responded with a expression of appreciation.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS BUSINESS

Dr. Stanley A. Hill: Your reference committee considered the report of the Committee on American Medical Education Foundation. We were most fortunate in having before the committee Dr. George F. Lull, Chicago, President of the Foundation, who contributed substantially to our deliberations. We commend the committee and especially the chairman for the increase in activity and we note with pride and pleasure the presentation of $8,654.47 to the University of Mississippi School of Medicine. Your committee expresses the fervent wish that this amount may be substantially increased in the future and that all members will see fit to participate in this program.

The report of the reference committee was unanimously adopted.

The Speaker then recognized the President and President-elect who called Dr. Frank M. Davis, Corinth, Vice President, to the rostrum and presented him with a Certificate of Meritorious Service for his vigorous work in organizational aspects of association activity during the 1960-61 year. Dr. Davis responded with an expression of appreciation.

REPORT OF THE COUNCIL ON MEDICAL SERVICE

Dr. Guy T. Vise: The Council on Medical Service is an elected body of this House of Delegates consisting of nine members. The work of your Council is conducted with the assistance of 10 committees of which seven are constitutional and three, *ad hoc*. This is a total working force of 71 elected and appointed physician-members, three *ex officio* general officer members, three consultants, and those assigned from the executive staff. The basic mission of the Council is the study of all aspects of medical care in Mississippi and the circumstances under which it is provided.

During the 1960-61 association year, the Council and its 10 committees conducted approximately 20 formal meetings, even more staff conferences, and sent representatives to national and regional meetings on subjects within the Council's sphere of interest and responsibility.

Committees of the Council

A wide variety of studies and action programs was conducted by the several committees of the Council. Among these are:

Committee on Cancer Control: Acting as the liaison mechanism with the American Cancer Society, this committee has recently been concerned with the effect of H.B.368, 1960 Regular Session of the Mississippi Legislature, on the tumor clinic program. Most such services curtailed last July have, however, been restored. The committee works with and assists the society in (1) the cytologic screening program, (2) professional and public education, and (3) the massive six year study to determine if ethnic, personal, cultural, and socioeconomic factors influence incidence of cancer.

Maternal and Child Care: The maternal mortality study, conducted with splendid cooperation from Mississippi physicians, will soon enter its fourth year. Annually, general summary findings are published as well as case reports deemed educational. Further methods of acquainting physicians with the results and importance of these studies are under consideration. Active support is being given the development of perinatal mortality studies in hospitals. Under advice from the committee, the University Hospital has applied for and been selected to participate in the first year's pilot study being conducted by the American Medical Association Research Foundation. When the study is expanded in 1962, the committee hopes to encourage and assist other Mississippi hospitals to participate. Scientific articles in this connection have been published by members of the committee and other professional education media are being utilized.

Industrial Health: Acting within a framework of policy recommended to and approved by this House in 1960, the committee has initiated studies of rehabilitation of the occupationally disabled. In this connection, there seems to be a lack of:

(1) Definition and description of attainable goals for rehabilitation of the occupationally disabled in Mississippi.

(2) Evaluation of effectiveness and adequacy of existing facilities, means, and resources for achieving these goals.

(3) Information as to (a) degree of coordination, (b) extent of lateral communication, and (c) mutuality of objectives among public and private agencies having an interest in rehabilitation of the occupationally disabled.

(4) Sufficient valid data upon which to base informed judgments as to additional minimal, optimal, or ideal facilities, means, and resources, if any, needed for achieving these goals.

Studies in this area will not be mere inventories but evaluations and conclusions based upon the effectiveness of presently available services, supplies, and support as relate to an hypothetical ideal situation in which all such means for rehabilitation are assumed to exist and be available within the meaning of previously stated policy. From this practical approach, the committee will report minimum increases needed, if any, to realize goals of the association in rehabilitation of the occupationally disabled.

In June 1960, the AMA House of Delegates redesigned the AMA Council on Industrial Health as the Council on Occupational Health. Your Council on Medical Service supports the committee's recommendation that it be redesignated the Committee on Occupational Health because the latter expression describes more adequately the field of endeavor and does not imply undue influence by an interested party, i.e., industry.

Blood and Blood Banking: This *ad hoc* committee conducted studies directed by this House in 1960 with respect to existing means for supply of human blood, procurement policies, and blood banking practices in Mississippi. Surveys were made of the 128 member institutions of the Mississippi Hospital Association. A vast majority of hospitals having more than 25 beds furnished information which has been compiled to include blood banking activities, laboratory practices, sources of blood supply, replacement policies, transfusion services, admissions and discharges, and blood bank management practices and policies. The Council has approved a proposal to publish these findings in the JOURNAL MSMA.

Additionally, the committee will sponsor a symposium on blood banking for the Mississippi Hospital Association on May 31. Other professional education activities are under consideration. The Council has approved continuation of the committee on an *ad hoc* basis.

Other committee activities: The Committee on Aging has worked extensively with various bodies of the association in supplying information, advising, and compiling data in this area of interest. Programs of the Committees on Mental Health, Diseases of the Heart, Federal Medical Services, and Relations Between Physical Therapy and Medicine are emphasizing previously initiated projects with others under development. A separate supplemental report of the Council will be made in connection with the relative value index study directed by this House.

Medical Care for the Indigent

Since the 1960 reporting, the Congress enacted Public Law 86-778, the Kerr-Mills program, which was implemented to a limited extent in Mississippi during April 1961. Provision has been made for payment up to $15 per day for hospitalization of those persons over age 65 who are receiving Old Age Assistance through the Department of Public Welfare. Basic financing was made possible on executive order transferring to the Welfare Department $500,000 from the State Hospital Commission appropriation of $1.5 million for the 1960-61 biennium. The program provides no services not previously available under the indigent care plan of the State Hospital Commission. Under this extension, physicians are expected to provide their services without charge.

Uniform Claim Form

After six years of study and negotiation, the association has approved and initiated use of a uniform health insurance claim form which is accepted by nearly 1,000 member companies of the Health Insurance Council. The form is produced and supplied by the association at cost to physicians and has been well received. The second 100,000 impressions were produced within a month of its introduction. Cooperation from the Health Insurance Council, particularly the Mississippi Chapter which is represented in the Technical Exhibit, has been superb. The form will assist physicians in a savings of time and costs.

Arthritis and Rheumatism Foundation

Early in the association year, the newly organized Mississippi Chapter, Arthritis and Rheumatism Foundation, applied to the association through your Council for sanction and approval as a voluntary health agency. In recommending approval of the Foundation, your Council points out that (1) medical policies of autonomous state chapters are established by physicians, (2) no payments are made for medical care to physicians, (3) participation in United Fund drives is not forbidden by the national organization, (4) objectives are centered in professional education, private research, and clinic units for local physicians, and (5) orientation of the total program to private medical practice. Examination of fund solicitation, disbursements, medical policy, and scientific activity has been made by the Council.

Other Activity

The Council continues to work in the area of emergency medical service, emphasizing preparation for service in natural disasters. Liaison is maintained with the AMA Council on Medical Service and its several committees as regards program activity and study projects. During the current association year, the following have served in elected capacities on the Council: Guy T. Vise, chairman; M. Q. Ewing, vice chairman; and S. Lamar Bailey, secretary. On behalf of all committee members and consultants, your Council is deeply grateful for the support of this House of Delegates, the Board of Trustees, and each association member in its enormous program of varied endeavor.

REPORT OF THE REFERENCE COMMITTEE ON MEDICAL PRACTICES

Dr. Lamar Arrington: Your committee considered the Report of the Council on Medical Service. Since the report is concerned with a number of disassociated topics your reference committee asks that it be permitted to consider this report *ad seratim* as regards the several separately designated sections of the report.

Your reference committee first wishes to comment on the extensive organization of the Council which consists of ten committees, among which are seventy-one elected and appointed physician-members and three *ex-officio* members.

Your reference committee considered that portion of the report relating to the Committee on Cancer Control. Your committee approves the activities of this committee.

Your reference committee considered that portion of the report relating to the Committee on Maternal and Child Care. The work and success of this committee is one of the more important scientific contributions to the activities of the Mississippi State Medical Association. Particular attention of the House of Delegates is invited to the committee's proposed activities in perinatal mortality studies. We concur in and approve these activities.

Your reference committee shares the enthusiasm of the Council on Medical Service for the excellence of work conducted by the Committee on Industrial Health. We concur in and approve the work of the committee in its studies of rehabilitation of the occupationally disabled.

The studies of the *ad hoc* Committee on Blood and Blood Banking have been very informative. We concur in and approve the proposed activities of the committee.

Your reference committee expresses appreciation for the varied and resourceful work of the Committee on Aging. We feel that the activities of this committee will be beneficial to the senior citizens of our state.

Your reference committee approves and commends the activities of the Committees on Mental Health, Diseases of the Heart, Federal Medical Services, and Relations Between Physical Therapy and Medicine. Your committee understands that these committees are working on previously initiated programs with others under development.

Your committee commends the work of the Council in developing a uniform claim form. The form is produced and supplied by the association at cost to physicians.

Your committee recommends that the newly organized Mississippi Chapter, Arthritis and Rheumatism Foundation, be approved by the association as a voluntary health agency.

Your committee received information relating to certain miscellaneous actions of the Council in areas of emergency medical service and liaison with the AMA Council on Medical Service. None of these matters requires action.

The report of the reference committee was unanimously adopted.

REPORT OF THE COUNCIL ON CONSTITUTION AND BY-LAWS

Dr. E. LeRoy Wilkins: Your Council considered that portion of the Report of the Council on Medical Service, having to do with recommending redesignation of the Committee on Industrial Health to the Committee on Occupational Health. This proposal was approved by the committee as well as the Council on Medical Service.

We recommend that Section 2, Chapter IX, By-Laws of the association be amended accordingly.

The report of the Council was unanimously adopted.

SUPPLEMENTAL REPORT OF THE COUNCIL ON MEDICAL SERVICE

Background

Dr. Guy T. Vise: At the 92nd Annual Session, Jackson, May 10-12, 1960, Dr. Frank L. Ramsay, Laurel, introduced Resolution No. 4, subject: Criteria for Sterilization Procedures Requested by Patients, as follows:

"WHEREAS, Physicians and hospitals are receiving an increasing number of requests for sterilization procedures for other than medically indicated reasons, and

"WHEREAS, The medical profession in Mississippi is dedicated to providing these services which benefit patients and recognizes that there are many ramifications of this problem among which are legal, moral, and ethical considerations, and

"WHEREAS, There is a need for an official policy utterance in this connection by the Mississippi State Medical Association as well as suggested criteria for observation in all such cases, now, therefore, be it

"Resolved, That the Council on Medical Service be requested to investigate and study this problem, suggesting a suitable policy position and appropriate guides for such criteria, if indicated, for use by the membership and professional hospital staffs of the state."

The House of Delegates adopted the recommendation of the Reference Committee on Medical Practice that the Council on Medical Service be requested to conduct studies proposed in the resolution, reporting to the 93rd Annual Session.

Sterilization Procedures

The commonly accepted method of sterilizing males—vasectomy—is said to have been devised by Dr. Harry C. Sharp of Indiana and the method for sterilizing females—salpingectomy—was discovered in France. In almost all instances, early employment of these procedures was related to eugenic reasons, first advanced in 1883 by Sir Francis Galton. The term "eugenics," derived from a Greek word meaning "well born," was first employed by Galton who defined it as the study of agencies under social control that may improve or impair future generations either physically or mentally.

About 1904, laws of heredity formulated by the Austrian monk, Gregory Mendel, were rediscovered after having been forgotten since publication 40 years previously. Although Mendel's studies were confined to plant life, they were interpreted as being applicable to human beings.

It should be recognized and appreciated that there are profound differences of scientific and legal opinion with respect to social benefits as well as civil and criminal liabilities arising out of performance of sterilization procedures.

Medical Indications

The medicolegal basis for all surgical intervention, except for emergencies, is lawful consent by or in behalf of the patient and the exercise of intent and effort by the physician to benefit the patient. In the usual sense, operations intended to produce sterility are performed for four reasons: (1) Eugenic, (2) genetic, (3) therapeutic, and (4) non-therapeutic. The first three are obviously for the conservation and protection of life, health, of well-being of the patient or to serve the public interest where the latter has a statutory basis. These are briefly defined.

(1) *Eugenic sterilization.* There are 29 states with statutes providing for sterilization of persons deemed to be socially inadequate, i.e., feebleminded, insane, epileptic, habitually criminal, or morally degenerate, 26 of which are compulsory. In 1928, the Mississippi legislature passed a Sex Sterilization Act which provides for involuntary sterilization for the mentally ill, mentally deficient, and epileptics. It is based upon the premise that the person to be sterilized is a probable potential parent of socially inadequate offspring which would be likewise afflicted. The law provides for 30 days minimum notice prior to performing the procedure which notice shall be given the patient, relatives or guardian with further provision for a hearing in the presence of the patient.

(2) *Genetic sterilization.* Genetic conditions such as Huntington's chorea, achondroplasia, hemophilia, hereditary spinal sclerosis, progressive subcortical encephalopathy, lipochondrodystrophy, phenylpyruvicaciduria, amaurotic familial idiocy, Laurence-Moon-Biedle syndrome, Niemann-Pick disease, cerebral symmetrical diplegia, and other static, incurable, and/or transmissible diseases which, of natural course, would for the reason of prevention of adding to the general population the burden of defectives or become the proximate cause of death or disability of the spouse are further bases for sterilization.

(3) *Therapeutic sterilization.* Any disease condition, not sufficiently amenable to definitive treatment, which would be aggravated by pregnancy to the detriment of the patient may be considered a medical indication for therapeutic sterilization. Examples of such condition are chronic severe hypertensive cardiovascular disease, advanced nephritis, advanced cardiac disease, isoimmunization due to Rh blood factor, and certain psychiatric disorders.

Non-therapeutic Sterilization

Medical, moral, and legal aspects of non-therapeutic sterilization can be placed in true perspective only when considered within a frame of reference understood to exclude any purely medical indication for the procedure. Requests by patients for this procedure may originate from a variety of personal reasons, as the professional experience of many physicians demonstrates.

Nothing in the Principles of Medical Ethics of the American Medical Association either encourages or permits a physician to judge moral behavior in his patient. Conversely, the Principles require that the physician safeguard confidences entrusted to him by his patient and not reveal character deficiencies observed unless required to do so by law or when necessary in the course of protecting the welfare of the patient or community.

The Mississippi State Medical Association has no policy for nontherapeutic sterilization but as regards the proper interest of medical organization in performance of such procedures, only physicians can be subject to ethical and judicial consideration. The obligation of physicians to act only in the best interests of their patients, however, is paramount, and for this reason, they are expected to exercise the highest degree of professional responsibility at all times.

Whether sterilization is performed or not in the absence of clear statutory authority and medical indication is a matter to be decided by the local professional community through the hospital professional staff. Such decision should con-

form to local attitudes and opinion within the bounds of a high level of ethical conduct by all concerned. Where such surgical procedures are approved and accepted under stated conditions, individual physicians should be completely at liberty to decline any or all such requests according to their freely exercised professional judgment and personal convictions.

In arriving at decisions to perform such procedures for whatever reason, physicians and hospitals are cautioned that grave legal implications are involved. Legal counsel, therefore, should be sought in formulation of policy as well as in individual cases where any doubt arises.

REPORT OF THE REFERENCE COMMITTEE ON MEDICAL PRACTICES

Dr. Lamar Arrington: Your reference committee considered the Supplemental Report of the Council on Medical Service. This report deals with criteria for sterilization procedures requested by patients, introduced at the 92nd Annual Session. Your committee appreciates the tremendous amount of work in developing this report. Your committee feels that criteria for eugenic, genetic, and therapeutic sterilization are available. We recommend that in regard to non-therapeutic sterilization, local hospital staffs set up their own criteria.

The report of the reference committee was unanimously adopted.

SUPPLEMENTAL REPORT OF THE COUNCIL ON MEDICAL SERVICE

Dr. Guy T. Vise: A committee to study relative value indices was appointed by the Council on Medical Service in 1958 after the matter of such studies had been discussed before the House of Delegates at two annual sessions. In 1959, the Council reported to the House of Delegates appointment of the committee and its assignment in these studies. At the 92nd Annual Session, the present study was specifically outlined to and approved by the House of Delegates for implementation and reporting to the 1961 Annual Session. Further, the Board of Trustees reviewed action by the House on the study and specifically authorized its conduct as directed.

Beginning with studies in 1955, the American Medical Association has maintained a continuing interest in relative value index studies. Initially, two resolutions before the AMA House of Delegates referred to development of a relative value index for diagnostic, medical, and surgical services. Four methods of realizing this goal as well as that of public education designed to develop appreciation for all fields of medical practice were considered:

(1) Promotion of understanding of the values of diagnostic and medical service apart from surgical service could not be undertaken until physicians themselves had first indicated by relativity indices the relationship between the two.

(2) The problem might be approached through public education but consequences of misunderstanding were obvious where data gaps existed.

(3) A possibility of extensive cost accounting studies as to various professional services was considered but seemed unwieldy and impractical.

(4) State-by-state relative value indices were considered as offering the best solutions to the overall dilemma, since each would be representative of and adjusted to local professional solutions.

In 1958, the AMA House of Delegates approved the principle of conducting relative value studies by each state medical association rather than a nation wide study. The Committee on Medical Practice was authorized to inform each state through regional or other meetings of the purpose, scope, and objectives of such studies. Where desired, the committee was authorized to assist state medical associations in the conduct of relative value studies.

The 1958 mandate of the AMA House of Delegates was reaffirmed in 1959 and five regional conferences have since been conducted. One and possibly two workshop type meetings will be conducted in 1961 on a national basis for exchange of information with emphasis on the design of such studies, nomenclature uniformity, coding systems, definitions, and other pertinent aspects of this research activity.

RELATIVE VALUE INDICES

Relative values are numerical unit designations expressing the relationship that one professional service bears to another in a stated category. They are a numerical listing of services to patients, suggesting to the physician an economic relationship but not a commercial value.

As such, relative value guides are *never* fee schedules, as examination of any such guide or index clearly shows. As conceived, researched, produced, and approved by several state medical associations, these indices are guides. Since the Principles of Medical Ethics states a physician may choose whom he will serve, none is binding upon any physician.

The American Medical Association defines a relativity index as having three distinct components: (1) A nomenclature and code number listing for professional procedures and services, (2) relative value numbers in terms of units, and (3) application of a conversion coefficient, selected by the individual physician to determine his fee, where and when desired. The nomenclature and

code number listing alone are of great use and benefit to practitioners in communicating precisely service performed or desired. The relative value number suggests the relationship between procedures and services within a stated category without assuming equal professional attainment by every physician. Finally, a means is provided through which physicians may make economic interpretations as deemed appropriate in their individual and respective judgments.

The study is divided into four areas: (1) medical services, (2) surgical services, (3) laboratory or pathology services, and (4) radiological services. None of these areas should be considered relative one to another because of varying overhead expenses, time differentials, varying degrees of professional attainment required to provide such services, and capacities of those able to provide them. Second, economic interpretations should be made *within* each category and not *between* or *among* categories. For example, procedure 9001, office visit, may carry a point value of 1.0 while total gastrectomy, procedure 3114, may be 80.0 in point value. The first is medical service and the second, surgical service. If the first were increased in economic terms of $1 and the same coefficient were applied to the latter, the $1 increase would become an $80 increase.

Your committee has previously presented reasons for establishing relative value indices and the present study project is, in itself, eloquent testimony to general agreement with the desirability of this understaking.

STUDY METHODS

In implementing the mandate of the House of Delegates, the Board of Trustees, and the Council on Medical Service, your committee obtained counsel from the American Medical Association and those experienced in research of this nature. It should be recalled that prior to initiating present studies, your committee conducted similar investigations with respect to Blue Shield indemnity schedules in Mississippi and elsewhere.

A 32 page questionnaire listing 453 services and procedures especially selected for this project was prepared and printed. The American Medical Association furnished printing services. These were mailed to those members of the association during late 1960 except for those who were engaged in purely professional institutional activity such as preventive medicine; local, state, and federal medical facilities; training as residents or interns; and others whose professional activities were such as to identify them apart from private practice.

From a return of 30 per cent, a satisfactory, representative, and actuarially sufficient response, individual IBM cards were prepared for each procedure or service reported by each responding physician. This totaled more than 27,000 separate cards and each contained five items of information: (1) procedure number, (2) county of responding physician, (3) component medical society area, (4) area of practice, i.e., generalist or specialist, the latter by designation, and (5) usual fee reported.

In no instance has the identity of any single respondent been recorded in the data processing or in any aspect of the study reporting.

These enormous compilations of data were processed through IBM and modal occurrences of fees were determined first on a state-wide basis and then on a regional basis to validate the initial computations. At this point, two areas of explanation are desirable:

First, the reason for surveying by usual fees, and

Second, the manner of computing the data.

Unless each individual physician responding to the survey were equipped to compute his own relative value index—which, obviously, none is—then the usual fee charged is the only uniform communications device commonly available for reporting individual concepts of procedure relativity. It is emphasized that this communication device was promptly processed in terms of relativity to other amounts reported and never cataloged as a fee.

The second explanation relates to the first. There are available to the committee three methods of statistical computation, all of which are valid under given circumstances. These are (1) the mean, (2) the median, and (3) the mode. The mean is an arithmetical average among unequal quantities derived by dividing the sum of such quantities by the number of quantities. Such an unqualified average is useless unless all the data fall so closely together that distinction among them is unimportant.

The median is that point in a statistical series where half the individuals in the series are to one side (of the median) and half are to the other. Where the data do not fall closely together, the median is more revealing than the mean but only to the extent of dividing the data into more useful groups.

The mode—the method of choice in relative value studies—is simply that individual in a statistical series which occurs most often. The nature of data received from physicians was such as to lend itself readily to this method. This has been the case in all other relative value studies.

Your committee required the removal of aberrants by disregarding the highest and lowest 10 per cents of the data spread for any given procedure. This meant removal of extremes, leaving the center 80 per cent as the valid informational body. When modal occurrences had been determined, a conversion factor was applied to obtain the relative point amounts. This factor may be any number less than unity.

FINDINGS AND RECOMMENDATIONS

Your committee has thus determined relative values for most of the procedures and services enumerated in the survey questionnaire and this determination is attached to and made a portion of this progress report. The studies are valid because there are:

(1) Sufficient scope and spread of the data received.

(2) Sufficient geographic and practice distribution.

(3) Determinations made by scientifically grounded and applied study methods.

(4) Revalidation proofing by regional grouping of the data.

At this point, however, a general overall relative value study for Mississippi does not yet exist, despite the formal research having been substantially completed. There remain the tasks of determining, by conference and investigation with various specialty groups, relative values for those procedures occurring less frequently in medical and surgical practice. Of the latter, there are approximately 1,200 recognized procedures to be considered. Further mass survey, however, is deemed unnecessary.

It is recommended that the committee be continued and the study completed.

COMMENTARY

The Council on Medical Service appreciates that this study was conducted under sometimes difficult circumstances even though full support and cooperation were received from the principal general officers, the Board of Trustees, and your Council. About 24 state medical associations have either completed or are in varying stages of conducting identical studies. In fully half of these states, studies of this nature are basic defenses for practice patterns because of governmental, union, management, and various private medical care plans in which pre-care agreements are inherent.

Simply because a state is not now confronted with such practice problems is neither indicative nor suggestive that such will not become the case. Where physicians have been glad to furnish their services without charge to some patients unable to pay for them, the progressive trend toward greater non-pay patient loads may become such that doctors are financially unable to furnish their services gratuitously any longer. If physicians find themselves in such circumstances and have been improvident or unrealistic while approaching this situation, then they may find themselves at tragic disadvantage. Once in this dilemma, it is less likely that physicians as a group will be able to recover their prerogative of influencing the circumstances under which their services are provided.

This relative value study is a bulwark against such an untenable eventuality, totally apart and aside from its immediate value to individual physicians for private use as desired.

REPORT OF THE REFERENCE COMMITTEE ON MEDICAL PRACTICES

Dr. Lamar Arrington: Your reference committee considered the Supplemental Report of the Council on Medical Service. This report deals with the Relative Value Index Study. Your reference committee expresses appreciation for the work of the committee. Considerable interest was expressed as regards the report of the committee. Your reference committee recommends that because of the controversial nature of this issue and the difference of views expressed, members of the association be polled as to whether the study should be continued, this to be done after delegates to this House have sufficient time to explain the issue to their respective societies.

The report of the reference committee was unanimously adopted.

REPORT OF THE COUNCIL ON SCIENTIFIC ASSEMBLY

Dr. William E. Lotterhos: Your Council on Scientific Assembly has completed its third full year of activity since its organization under a revision in the By-Laws. In 1960, a further revision created a new scientific section and your Council is now comprised of seven formal scientific section chairmen and your Secretary-Treasurer. This body is charged with the planning and organization of the association's scientific activity to include formal section programs, the scientific exhibits, the technical exhibits, and coordination of activities of those specialty societies and groups identified with your annual session.

Your Council feels that the 93rd Annual Session marks a scientific milestone in the 104-year history of our association. At this annual session, there will be conducted the inaugural meeting of the Section on General Practice. Each member is cordially invited to attend in this section whether registered as a member or not.

Your Council observes that continued growth of the annual session is such as to place extensive demands upon available hotel facilities. In this connection, we commend and applaud the management of the Buena Vista and White House for their willing cooperation in assisting in solution of many of these problems. Space limitations adversely affected our technical and scientific exhibits during the present annual session and it was necessary to decline a number of requests which your Council would have preferred to include. We invite the attention of this House of Delegates to the new and additional convention facilities which have been completed in Jackson since the 92nd Annual Session in 1960, to include the Olympic Room at the Hotel Heidelberg and the King Edward Hall at the Hotel King Edward. Each of these facilities can easily accommodate exhibits of 75 to 100 booths, thereby offering an easy solution to the hitherto urgent problem of space in Jackson.

All members and guests in attendance are encouraged to participate in all phases of the scientific assembly within the spheres of their respective professional interests. Each is urged to visit the technical exhibits and to budget sufficient time to call at each booth and become acquainted with professional service representatives present.

Finally, your Council on Scientific Assembly earnestly hopes that the present annual session is professionally profitable and personally enjoyable to all. Deep appreciation is expressed for the splendid cooperation received by those of us charged with planning and organizing the annual session.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS BUSINESS

Dr. Stanley A. Hill: Your committee considered the report of the Council on Scientific Assembly. We commend the work of the Council for the excellent program which has been presented during the 93rd Annual Session and we feel that the high standards of the association with respect to scientific activity have not merely been maintained but strengthened.

There was some comment before your committee in connection with the Section on Medicine having three out-of-state speakers and it is pointed out that one such speaker was sponsored by the Mississippi Radiological Society to include payment of all expenses. This appearance was approved by the Council prior to this annual session and your reference committee feels that this note of explanation will clarify any misunderstandings which might exist. It was observed that the Section on General Practice had no Mississippi speakers and it is suggested that the section, in planning future programs, reexamine its position in connection with permitting the appearance of local essayists.

The report of the reference committee was unanimously adopted.

REPORT OF THE COUNCIL ON LEGISLATION

Dr. William E. Lotterhos: Your Council on Legislation is elected by the House of Delegates in accordance with Section 7, Chapter IX, By-Laws of the association. Again, it is the feeling of your Council that no single area of interest before the medical profession exceeds legislation in urgency and importance.

Although the Forand bill, H.R.4700, 86th Congress, was defeated in the House Committee on Ways and Means, there are now before the 87th Congress two identical proposals which, if anything, go beyond the last version of the Forand bill posing a threat both to the quality and traditional pattern of medical care. Your Council has reference to the King-Anderson bills, H.R.-4222 and S.909, compulsory care of the aged under Social Security. A major portion of all efforts exerted by your Council has been devoted to opposing these bills under policy enunciated by the Board of Trustees. In this specific connection, your Council has developed a five point program:

(1) Informing the membership of issues involved.

(2) Conducting liaison with our allies.

(3) Communication with the Mississippi Congressional delegation.

(4) Informing the public through mass media and other suitable means.

(5) Conduct of a letter writing campaign.

Extensive use has been made of communications material developed both by the American Medical Association and the Mississippi State Medical Association. Our conservative press in Mississippi shares our views on the current effort to socialize medicine and editorial expressions by the press are gratefully acknowledged. Various conservative and influential organizations in Mississippi also oppose these measures and have stated their positions publicly.

Your Council urges every member of the association to inform himself on these critical issues and to act vigorously in communication with patients, the public at large, his colleagues, and members of the Congress in the interest of resisting total socialization to the detriment of our patients and profession.

Other legislative issues of national importance are being monitored and where appropriate, your

Council initiated or requested action by various segments of your association.

Under mandates of this House of Delegates, bills will be prepared and introduced at the 1962 Regular Session of the Mississippi Legislature on relief from civil liability for any person rendering care in good faith at the scene of an accident. This is known as the "Good Samaritan" law and two states, South Dakota and California, have enacted such statutes since the 92nd Annual Session of this association. Additionally, a reduction of the statute of limitation as relates to professional liability will again be sought before the Legislature. Your Council will carefully monitor all introductions before the regular session and act where necessary or appropriate within the framework of existing policy. Particular attention will be given any effort to grant licensure and legal sanction to cultists, to safeguarding the medical practice act in concert with our State Board of Health, and to support of such medical activities as are approved by the association.

Since the 92nd Annual Session, Public Law 86-778, the Kerr-Mills program, has been enacted and implemented to a limited extent in Mississippi by providing increased reimbursement rates for hospitalization of persons receiving Old Age Assistance. This was accomplished by means of an executive order transferring $500,000 from the $1.5 million appropriation of the State Hospital Commission to the Department of Public Welfare. The program provides no services which were not previously available. Your Council believes that the state program of care for the indigent should apply equally to persons of all ages who are found to be genuinely indigent. The hospital services program for Old Age Assistance recipients with vastly increased reimbursement rates appears not only inequitable but economically indefensible and untenable.

During the current association year, members of the association were responsive to requests to assist in the overall legislative effort of your association. Your Council has been represented at various state, regional, and national meetings concerned with legislation and has endeavored to work closely with the Board of Trustees in this and other respects.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS BUSINESS

Dr. Stanley A. Hill: Your reference committee considered the report of the Council on Legislation. We concur with the Council in that there is no single area of interest before the medical profession which exceeds legislation in urgency and importance. We commend not only the members of this Council but also the officers and Board of Trustees and all who have participated in the legislative program of the association. We urge every member to inform himself of the critical issues facing medicine and to support the legislative efforts of our association in the interests of our state, nation, and our patients.

The report of the reference committee was unanimously adopted.

REPORT OF THE COUNCIL ON SOCIOECONOMIC AFFAIRS

Dr. Lyne S. Gamble: Your Council on Socioeconomic Affairs is elected by the House of Delegates in accordance with Section 5, Chapter IX, By-Laws of the association. It consists of nine members, one from each association district. The Council is charged with responsibility of studying and inquiring into all socioeconomic aspects of medical practice from broad and inclusive viewpoints. The Council was activated only during the 1959-60 association year and its early deliberations have been devoted to orientation of its members and examination of basic study areas.

At the 92nd Annual Session, your Council reported that it hoped to develop useful information with respect to medical care costs and patterns of care as well as the relationship to and importance of voluntary prepayment and insurance plans to the former. In adopting this proposal, the House of Delegates approved the proposed studies and methods suggested by your Council.

During the 1960-61 association year, the American Medical Association authorized organization of a Commission on the Cost of Medical Care and approved a three year study program by this new body. As stated in our first annual report, your Council has no desire to duplicate the work of other bodies at any level of medicine, feeling that such efforts as may be constructively exerted should be in cooperation with and adjunctive to such similar efforts. Accordingly, your Council reports further activities in the task of considering certain basic data and proposes to offer its services to work with the new AMA commission in these broad and general inquiries.

Your Council is of the firm opinion that voluntary health insurance and prepayment programs constitute the principal bulwark in the continuing struggle against socialized medicine. It is, therefore, our belief that no effort should be spared to extend such coverage to more individuals and to make the provisions of these plans more equitable to physicians.

Again, your Council requests cooperation from all members of the association and solicits suggestions and comments in furthering its studies.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS BUSINESS

Dr. Stanley A. Hill: Your reference committee considered the Report of the Council on Socioeconomic Affairs. The work of this Council is an apparent duplication of effort with the Council on Medical Service and we recommend that the Council on Socioeconomic Affairs be dissolved.

The report of the reference committee was unanimously adopted.

REPORT OF THE JUDICIAL COUNCIL

Dr. E. LeRoy Wilkins: The Judicial Council is an elected standing body of this House of Delegates, responsible thereto, prescribed by Sections 1 and 4, Chapter IX, By-Laws of the association. At the 92nd Annual Session, 1960, your Council outlined to this House of Delegates those procedural guides deemed necessary for the proper conduct of its duties and responsibilities. These operating guides and procedures were adopted by the House.

Your Judicial Council reminds this House that prior to 1958, the judicial authorities of the association were vested in the Board of Trustees. This power is now reposed in the Judicial Council whose decision, according to the By-Laws, shall be final. This body is responsible for jurisdiction over all questions involving membership, all controversies arising under the Constitution and By-Laws, interpretation and application of the *Principles of Medical Ethics,* controversies between two or more component societies of the association and among members of the association.

During the 1960-61 association year, it has not been necessary for your Council to convene either for hearings of original or appellate jurisdiction with respect to matters at controversy. Again, your Council expresses the hope that its chief function will be that of interpretation and not of hearing charges. It will stand ready, however, to discharge all duties in the latter connection where and when necessary.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS BUSINESS

Dr. Stanley A. Hill: Your reference committee considered the report of the Judicial Council. We observe that it was not necessary for this Council to convene this year for the exercise of judicial powers and we feel that this is a tribute and a compliment to the members of the Mississippi State Medical Association. Your reference committee approves the report of the Council.

The report of the reference committee was unanimously adopted.

RESOLUTION NO. 1, IN MEMORIAM

Dr. William E. Lotterhos: WHEREAS, There are absent from among our numbers 24 members who have been called by Divine Providence since the 92nd Annual Session; and

WHEREAS, Although we are grieved upon the passing of these beloved colleagues and friends, we are inspired by their lives of service and professional attainment; and

WHEREAS, This expression of our grief, deep affection, and respect should be recorded permanently among official records of the Mississippi State Medical Association, now, therefore, be it

Resolved, That this House of Delegates does mourn the passing of the following esteemed colleagues:

George W. Bounds, Meridian, September 18, 1960
William H. Brandon, Clarksdale, December 14, 1960
James L. Brookshire, Hushpuckena, July 27, 1960
Glenwood L. Cook, Laurel, January 7, 1961
George S. Daly, Columbia, March 8, 1961
Hartwell A. Eldredge, Bay St. Louis, December 21, 1960
Lucien C. Feemster, Jr., Tupelo, November 13, 1960
Lee T. Fox, Canton, August 29, 1960
William B. Hyde, Durant, October 1, 1960
William W. Irby, Meridian, May 12, 1960
Sterling K. Johnson, Pascagoula, January 21, 1961
Robert T. McLaurin, Laurel, August 18, 1960
Mose M. McMillan, Guntown, June 17, 1960
Edward C. O'Cain, Winona, June 13, 1960
Edward C. Parker, Gulfport, March 2, 1961
Paul H. Parker, Meridian, July 21, 1960
Love E. Pennington, Jackson, May 17, 1960
Beverley E. Smith, Jackson, July 7, 1960
Franklin F. Smith, Crystal Springs, March 7, 1961
Robert W. Smith, Canton, October 10, 1960
Benjamin A. Stafford, Jr., Rolling Fork, January 27, 1961
Lee H. Trapp, Monticello, November 7, 1960
James A. Wadlington, Belzoni, March 4, 1961
George W. Wallace, Biloxi, October 31, 1960

ACTION OF THE HOUSE OF DELEGATES

Without objection, Resolution Number 1 was acted upon without referral and was unanimously adopted by all members of the House of Delegates standing in silent tribute.

RESOLUTION NO. 2, NURSE ANESTHETISTS

Dr. C. W. Patterson: WHEREAS, A shortage of nurse anesthetists exists in certain areas of Mississippi, and

WHEREAS, This shortage appears to be becoming increasingly acute and it further appears that

training programs for nurse anesthetists are insufficient, and

WHEREAS, It does not appear feasible for smaller hospitals throughout Mississippi to be served by anesthesiologists, now, therefore, be it

Resolved, That the association undertake a study to determine both availability and sources of supply of nurse anesthetists in Mississippi and if problems in this connection are found to exist that suitable solutions be suggested.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS BUSINESS

Dr. Stanley A. Hill: Your reference committee considered Resolution No. 2, subject "Nurse Anesthetists" in which the association has been requested to study both the availability and sources of supply of nurse anesthetists in Mississippi. Discussion before your committee brought out the fact that physicians recognize that a shortage situation exists and your committee suggests that this resolution be formally referred to the Mississippi State Nurses Association.

The report of the reference committee was unanimously adopted.

RESOLUTION NO. 3 COMPULSORY SOCIAL SECURITY CARE

Dr. W. W. Oser: WHEREAS, H.R. 4222 and S. 909, proposals for compulsory health care of the aged under Social Security, have been introduced in the 87th Congress with sponsorship by the administration, the AFL-CIO, and certain other organizations, and

WHEREAS, These measures, if enacted, would establish a federal system of socialized medicine resulting in inferior patient care, huge and unnecessary expenditures of public funds, and the levying of a substantially increased tax burden upon employees, employers, and most self-employed, and

WHEREAS, Pearl River County physicians are dedicated to the goal of providing the highest quality medical care for all citizens and believe it inappropriate, extravagant, and contrary to the public well-being for the federal government to undertake the furnishing of health services under Social Security, now, therefore, be it

Resolved, That the Mississippi State Medical Association is actively opposed to enactment of H.R. 4222 or S. 909.

RESOLUTION NO. 4 COMPULSORY SOCIAL SECURITY CARE

Dr. S. E. Field: WHEREAS, H.R. 4222 and S. 909, proposals for compulsory health care of the aged under Social Security, have been introduced in the 87th Congress with sponsorship by the administration, the AFL-CIO, and certain other organizations, and

WHEREAS, These measures, if enacted, would establish a federal system of socialized medicine resulting in inferior patient care, huge and unnecessary expenditures of public funds, and the levying of a substantially increased tax burden upon employees, employers, and most self-employed, and

WHEREAS, Mississippi physicians are dedicated to the goal of providing the highest quality medical care for all citizens and believe it inappropriate, extravagant, and contrary to the public well-being for the federal government to undertake the furnishing of health services under Social Security, now, therefore, be it

Resolved, That the Mississippi State Medical Association is actively opposed to enactment of H.R. 4222 or S. 909.

RESOLUTION NO. 5 COMPULSORY SOCIAL SECURITY CARE

Dr. Joseph B. Rogers: WHEREAS, H.R. 4222 and S. 909, proposals for compulsory health care of the aged under Social Security, have been introduced in the 87th Congress with sponsorship by the administration, the AFL-CIO, and certain other organizations, and

WHEREAS, These measures, if enacted, would establish a federal system of socialized medicine resulting in inferior patient care, huge and unnecessary expenditures of public funds, and the levying of a substantially increased tax burden upon employees, employers, and most self-employed, and

WHEREAS, Mississippi physicians are dedicated to the goal of providing the highest quality medical care for all citizens and believe it inappropriate, extravagant, and contrary to the public well-being for the federal government to undertake the furnishing of health services under Social Security, now, therefore, be it

Resolved, That the Mississippi State Medical Association is actively opposed to enactment of H.R. 4222 or S. 909.

RESOLUTION NO. 6 COMPULSORY SOCIAL SECURITY CARE

Dr. J. A. K. Birchett: WHEREAS, H.R. 4222 and S. 909, proposals for compulsory health care of the aged under Social Security, have been introduced in the 87th Congress with sponsorship by the administration, the AFL-CIO, and certain other organizations, and

WHEREAS, These measures, if enacted, would establish a federal system of socialized medicine resulting in inferior patient care, huge and unnecessary expenditures of public funds, and the

levying of a substantially increased tax burden upon employees, employers, and most self-employed, and

WHEREAS, Mississippi physicians are dedicated to the goal of providing the highest quality medical care for all citizens and believe it inappropriate, extravagant, and contrary to the public well-being for the federal government to undertake the furnishing of health services under Social Security, now, therefore, be it

Resolved, That the Mississippi State Medical Association is actively opposed to enactment of H.R. 4222 or S. 909.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS BUSINESS

Dr. Stanley A. Hill: Your reference committee considered Resolutions Nos. 3, 4, 5, and 6, all having to do with compulsory health care for the aged under Social Security, the King-Anderson bills, H.R. 4222 and S. 909, now pending before the Congress. We concur with each resolution which reiterates the opposition of the association to this proposed extravagant, unnecessary, and patently socialized program.

The report of the reference committee was unanimously adopted.

RESOLUTION NO. 7, BLUE SHIELD SCHEDULE

Dr. W. W. Oser: WHEREAS, The basic Blue Shield fee schedule has not been revised since its introduction, and

WHEREAS, The Blue Cross rate of payments to the participating hospitals has been raised many times, and

WHEREAS, The Blue Cross-Blue Shield premium rates have been revised upward many times without explanation to the subscriber that only the hospitals were to receive more money, and

WHEREAS, The cost of practicing medicine has been constantly increasing, now, therefore, be it

Resolved, That the directors representing the Mississippi State Medical Association on the Board of Blue Cross-Blue Shield be directed to seek (1) A revision of the Blue Shield fee schedule to a more equitable share of the premiums collected, and (2) institute a program of information to the general public showing the rate of division of the premium dollar between the Blue Cross-Blue Shield, and (3) investigate the feasibility of separating Blue Cross-Blue Shield into two separate entities, the one dealing strictly with hospitalization and the other dealing with fees to the doctors.

REPORT OF THE REFERENCE COMMITTEE ON MEDICAL PRACTICES

Dr. Lamar Arrington: Your reference committee considered Resolution No. 7, Revision of Blue Shield Fee schedule. After extended discussion your reference committee feels that since there is a separation of Blue Cross-Blue Shield at this time and since Blue Cross-Blue Shield is in the process of revising their respective schedules, accordingly, Resolution No. 7 be not adopted.

The report of the reference committee was unanimously adopted.

RESOLUTION NO. 8, RELATIVE VALUE INDEX

Dr. William A. Smithson: WHEREAS, The Central Medical Society, in regular meeting January 13, 1961, considered the relative value index study undertaken by the Mississippi State Medical Association, and

WHEREAS, Considerable opposition within the Central Medical Society to the continuation of this study was apparent, and it is deemed that there are harmful implications in this study far beyond the apparent intent and that the ultimate result of such a study would be harmful to the practice of medicine rather than helpful, and

WHEREAS, A motion was passed at the January 1961 meeting opposing the relative value index study and, at the May 2, 1961, regular meeting of the society, a motion was passed that the Central Medical Society delegates to the 93rd Annual Session of the Mississippi State Medical Association be instructed in this connection as outlined in the action of the society, and

WHEREAS, That the Central Medical Society is opposed to the relative value scale; that it not cooperate in the research study conducted by the Mississippi State Medical Association on the relative value scale; now, therefore, be it

Resolved, That the Mississippi State Medical Association should reconsider its position and cease and desist in any further consideration or application of a relative value index study as applied to medical practice in the state of Mississippi.

RESOLUTION NO. 12, RELATIVE VALUE INDEX

Dr. Joe S. Covington: WHEREAS, The House of Delegates directed that a relative value index study be undertaken and solicited the cooperation of all members in this work, and

WHEREAS, The East Mississippi Medical Society, in special called meeting on April 18, 1961, considered the preliminary report of this study and recognized its importance, value, and need, now, therefore, be it

Resolved, That this study be continued as necessary by the committee and that the East Mis-

sissippi Medical Society endorses this project and commends the committee for its work.

RESOLUTION NO. 12, RELATIVE VALUE INDEX

Dr. Eugene M. Murphey, III: WHEREAS, The Mississippi Society of Internal Medicine in annual session voted unanimously in favor of continuation of study of the relative value index as prepared by the Mississippi State Medical Association, and

WHEREAS, The American Society of Internal Medicine also favors such a study, and

WHEREAS, The American College of Physicians also strongly urges such a study in various areas under its jurisdiction, now, therefore, be it

Resolved, That the Mississippi State Medical Association vote in favor of continuing study of the relative value index scale.

REPORT OF THE REFERENCE COMMITTEE ON MEDICAL PRACTICES

Dr. Lamar Arrington: Your reference committee considered Resolutions Nos. 8, 9, and 12, Relative Value Index Study. We feel that the resolutions are not necessary because of the action by your committee on the relative value index study. Accordingly, we recommend that Resolutions Nos. 8, 9, and 12 be not adopted.

The report of the reference committee was unanimously adopted.

RESOLUTION NO. 10, GENERAL PRACTICE RESIDENCIES

Dr. John B. Howell, Jr.: WHEREAS, Many general practice residencies are unfilled and many have inadequate progressive and integrated training programs, and

WHEREAS, The present two-year family practice pilot program of the American Medical Association fails to adequately prepare the young physician to do general practice in most Mississippi communities, and

WHEREAS, Each segment of organized medicine has—and still—determines the minute details and over-all content of their respective training programs, and, therefore, be it

Resolved, That the Council on Medical Education and Hospitals of the American Medical Association, be directed to formulate other pilot two-year progressive training programs which would include training in Obstetrics and Operative Surgery.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS BUSINESS

Dr. Stanley A. Hill: Your reference committee considered Resolution No. 10, subject "General Practice Residencies" and in approving this resolution, a single alteration is recommended in the resolving clause to read as follows:

"Resolved, That the Council on Medical Education and Hospitals of the American Medical Association be requested to formulate other pilot two-year progressive training programs which would include training in obstetrics and operative surgery."

Your committee further recommends that this resolution be introduced before the AMA House of Delegates, June 1961 Annual Session at New York.

The report of the reference committee was unanimously adopted.

RESOLUTION NO. 11 RELATIONS BETWEEN MEDICINE AND OPTOMETRY

Dr. John G. Caden: WHEREAS, In 1959, there was introduced in the House of Delegates Resolution No. 31 calling for the establishment of a Commission to Study the Relation of Medicine to Optometry, and to report to the House of Delegates, and

WHEREAS, The House of Delegates caused to be established a Subcommittee to Study the Relation of Medicine to Optometry, under the Joint Committee to Study Paramedical Areas in Relation to Medicine, and

WHEREAS, The original Joint Committee to Study Paramedical Areas in Relation to Medicine has been succeeded by the Committee on Relationships of Medicine with Allied Health Professions and Services, and

WHEREAS, Optometrists are not ancillary to medicine, but are independent licensed practitioners, and, therefore, do not constitute an allied health profession, and

WHEREAS, There exists confusion in the public mind as to the distinction between medical care for patients with ocular complaints and optometric services, and

WHEREAS, The lack of understanding in this area is a threat to the welfare of the patient, now, therefore, be it

Resolved, That the House of Delegates establish a Commission on the Relation of Medicine to Optometry, to be appointed by the Speaker of the House—at least half the members of which Commission shall be physicians practicing in the ophthalmological branch of medicine, and be it further

Resolved, That it shall be the specific function of the Commission to conduct a broad study, from the standpoint of the public interest, of the problems involved in the present relation of medicine to optometry, and to explore all possible and desirable solutions to these problems, and be it further

Resolved, That the Board of Trustees be re-

quested to provide adequate personnel and funds for the proper performance of the duty assigned to this Commission, and be it further

Resolved, That this Commission shall report to the House of Delegates not later than June 1962.

REPORT OF THE REFERENCE COMMITTEE ON MEDICAL PRACTICES

Dr. Lamar Arrington: Your committee considered Resolution No. 11, Relations Between Medicine and Optometry. We concur in the objectives sought and recommend that a Committee on the Relation of Medicine to Optometry be established.

In discussion, the Speaker stated that the prerogative of appointment accrued to the President under the By-Laws and this observation was accepted by the Chairman of the reference committee. The report was adopted as amended.

RESOLUTION NO. 13, CRITERIA FOR RHEUMATIC DISEASE TREATMENT

Dr. Eugene M. Murphey, III: WHEREAS, The Council on Rheumatic Fever of the American Heart Association has abstracted the reported studies in the medical literature relating to the diagnostic criteria and the prophylaxis and treatment of rheumatic fever and rheumatic heart disease, and

WHEREAS, The Council has published several pamphlets outlining these criteria and procedures, and

WHEREAS, The American Heart Association has urged each of its affiliated heart associations to continue the dissemination of this information to every practicing physician, and

WHEREAS, The Mississippi Heart Association stands ready to publish a compilation of all this material, now, therefore, be it

Resolved, That the Mississippi State Medical Association endorse the publication of these diagnostic criteria and regimens of prophylaxis and treatment of rheumatic fever and rheumatic heart disease and endorse the distribution of these items to each practicing physician in Mississippi.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS BUSINESS

Dr. Stanley A. Hill: Your reference committee considered Resolution No. 13, subject "Acceptable Criteria for Diagnosis, Prophylaxis, and Treatment of Rheumatic Diseases." The goals sought in this resolution are that the association endorse publication of diagnostic criteria and regimens of prophylaxis and treatment of rheumatic fever and rheumatic heart diseases and endorse the distribution of these items to each practicing physician in Mississippi. Your reference committee concurs in this resolution and recommends its adoption.

The report of the reference committee was unanimously adopted.

RESOLUTION NO. 14, SCIENTIFIC ACTIVITIES

Dr. Temple Ainsworth: WHEREAS, The scientific work of the association has been progressively improved during recent years, offering excellent postgraduate opportunity to all members, and

WHEREAS, Many specialty groups regularly meet concurrently with the association but do not necessarily share in the seven formal scientific sections as to representation, now, therefore, be it

Resolved, That the Council on Scientific Assembly be requested to confer with representatives of the several specialty societies to the end of placing before the seven scientific sections papers and scientific presentations of interest in the several specialty fields.

REPORT OF THE COUNCIL ON CONSTITUTION AND BY-LAWS

Dr. E. LeRoy Wilkins: Your Council considered Resolution No. 14, subject "Scientific Activities of the Mississippi State Medical Association," introduced by Dr. Temple Ainsworth. Your Council concurs in the intent and objectives sought in this resolution. Your Council, however, wishes to amend the resolving clause of this resolution so that it reads as follows:

"RESOLVED, That the Council on Scientific Assembly be requested to confer with representatives of the several specialty societies to the end of placing before the seven scientific sections papers and scientific presentations of interest in the several specialty fields, this to be done by appointment of a committee under Section 3, Chapter IX, Council on Scientific Assembly, By-Laws, representing urology, orthopedic surgery, neurosurgery, anesthesiology, pathology, and radiology, the committee to consult, on call, with the Council in order to secure presentations by representatives of such specialties.

Your Council recommends the adoption of the resolution as amended and points out that the sponsor has agreed to the amendment.

The report of the Council was unanimously adopted.

RESOLUTION NO. 15, EXPRESSION OF GOOD WISHES

Dr. Thomas J. Marland: WHEREAS, Dr. T. E. Wilson of Jackson, Mississippi, has been a loyal and faithful member of the Mississippi State Medical Association for many years, and

WHEREAS, Dr. Wilson's contributions to the scientific and other important aspects of medical practice in Mississippi have been and will continue to be of extraordinary value to the Mississippi State Medical Association, now, therefore, be it

Resolved, That this House of Delegates convey its good wishes and also these sentiments to Dr. Wilson who has recently experienced a serious major operation, and be it further

Resolved, That this House of Delegates commend Dr. Wilson to recover with God speed and return to this society of physicians at the earliest possible date.

ACTION OF THE HOUSE OF DELEGATES

Without objection, Resolution Number 15 was acted upon without referral and unanimously adopted by the House of Delegates.

RESOLUTION NO. 16, ASSOCIATE MEMBERSHIP

Dr. Walter H. Simmons: WHEREAS, It is deemed advisable to include among the membership of local medical societies, the Mississippi State Medical Association, and American Medical Association all eligible, ethical doctors of medicine, and

WHEREAS, There are such physicians among members of the medical faculty of the University of Mississippi School of Medicine who are not licensed to practice in Mississippi and are, therefore, not eligible for active membership, now, therefore, be it

Resolved, That Section 3 (c), Chapter I, By-Laws of the Mississippi State Medical Association be amended to include members of medical faculties of medical schools approved by the American Medical Association who are not licensed to practice in Mississippi as being eligible for associate membership subject to all other qualifications required of candidates for membership.

REPORT OF THE COUNCIL ON CONSTITUTION AND BY-LAWS

Dr. E. LeRoy Wilkins: Your Council considered Resolution No. 16, subject "Associate Membership," introduced by Dr. Walter Simmons. Your Council concurs in this resolution and recommends that it be adopted.

The report of the council was unanimously adopted.

ADDITIONAL ACTIONS OF THE HOUSE OF DELEGATES

There were no fraternal delegates from other state medical associations present. Dr. John W. Hunter, Meridian, Fraternal Delegate to Alabama, reported his participation in the meeting of the Medical Society of the State of Alabama by personal communication. Dr. A. V. Beacham, Magnolia, reported his attendance and participation as Fraternal Delegate to the Louisiana State Medical Society.

Dr. John G. Archer, Greenville, delivered the 1961 Distinguished Service Oration on the late Dr. Paul G. Gamble.

The President presented to the House of Delegates the following officers of the Woman's Auxiliary to the Mississippi State Medical Association: Mrs. Lee R. Reid, Jackson, 1960-61 President; Mrs. John G. Egger, Drew, 1961-62 President; and Mrs. A. T. Tatum, Petal, 1961-62 President-elect.

Dr. C. D. Taylor, Jr., General Chairman of the 93rd Annual Session, reported the official attendance of 729 with 419 physicians, 144 members of the Auxiliary, and 166 others.

REPORT OF THE REFERENCE COMMITTEE ON RULES AND ORDER OF BUSINESS

Dr. W. Winston Barnard: Your Reference Committee on Rules and Order of Business commends the Speaker and Vice Speaker for the manner in which they have conducted business before this House of Delegates. We believe that all members will concur with your committee in commending these officers and expressing our appreciation to them for just, impartial, but kindly consideration of our respective needs and requirements.

Your Reference Committee desires at this time to offer the following resolution for consideration by this House of Delegates:

WHEREAS, The 93rd Annual Session of the Mississippi State Medical Association has been conducted at Biloxi, Mississippi, during the period May 9-11, 1961, and

WHEREAS, The present annual session has been one of the largest, most profitable and enjoyable meetings in the 104-year history of our association, now, therefore, be it

Resolved, That expressions of deep appreciation are made to our hosts; to the efficient managements of the several hotels, especially the Buena Vista and White House; to the press, radio, and television; to the gracious ladies of the Auxiliary who always contribute so substantially to our meetings; to the many able essayists for their informative and stimulating presentations, making our scientific work extremely profitable and enjoyable; to the Council on Scientific Assembly for organization of the splendid program; to our tireless, energetic Chairman, Dr. C. D. Taylor, Jr., and his gracious counterparts in the Auxiliary, Mrs. James T. Thompson and Mrs. Eldon L. Bolton; to the officers of the association and the Board

of Trustees; to our technical exhibitors; and the courteous professional service representatives; to our scientific exhibitors; and to all those who shared in the responsibilities of planning and conducting this great annual session.

The report of the reference committee was unanimously adopted.

REPORT OF THE ELECTION OF OFFICERS

President-elect—C. P. Crenshaw, Collins

Vice Presidents—Joseph L. Guyton, Pontotoc; Tom H. Mitchell, Vicksburg; A. T. Tatum, Petal

Secretary-Treasurer—C. G. Sutherland, Jackson

Associate Editor, JOURNAL MSMA—Dewitt W. Hamrick, Corinth

Speaker, House of Delegates—B. B. O'Mara, Biloxi

Vice Speaker, House of Delegates—Howard A. Nelson, Greenwood

Delegate, AMA—J. P. Culpepper, Jr., Hattiesburg

Alternate Delegate, AMA—G. Swink Hicks, Natchez

Board of Trustees—John G. Archer, Greenville, District One; Joseph B. Rogers, Oxford, District Two; H. H. McClanahan, Jr., Columbus, District Three

Council on Budget and Finance—Omar Simmons, Newton

Council on Medical Education—E. LeRoy Wilkins, Clarksdale

Council on Constitution and By-Laws—John B. Howell, Jr., Canton

Council on Legislation—Lamar Arrington, Meridian

Judicial Council—A. T. Tatum, Petal, District Seven; G. Swink Hicks, Natchez, District Eight; W. J. Weatherford, Pascagoula, District Nine

Council on Medical Service—T. E. Ross, Hattiesburg, District Seven; Everett H. Crawford, Tylertown, District Eight; F. C. Minkler, Pascagoula, District Nine

Council on Socioeconomic Affairs—Frank L. Ramsay, Laurel, District Seven; O. G. Eubanks, Crystal Springs, District Eight; S. B. McIlwain, Pascagoula, District Nine

Blue Cross-Blue Shield Directors—G. Swink Hicks, Natchez; R. B. Caldwell, Baldwyn; George H. Martin, Vicksburg; T. E. Ross, Hattiesburg

State Board of Health—District One: R. B. Caldwell, Baldwyn; Frank M. Davis, Corinth; Dewitt W. Hamrick, Corinth. District Three: George F. Archer, Greenville; W. T. Wilkins, Clarksdale; Howard A. Nelson, Greenwood

Board of Trustees, Mental Institutions—James G. Thompson, Jackson; S. Lamar Bailey, Kosciusko; C. P. Crenshaw, Collins; G. Swink Hicks, Natchez; Wendall B. Holmes, McComb

Fraternal Delegates—To Alabama, J. T. Davis, Corinth; to Arkansas, C. W. Patterson, Rosedale; to Louisiana, A. V. Beacham, Magnolia; to Tennessee, Guy T. Vise, Meridian

The Speaker recognized Mrs. Cummings H. McCall, Gulfport, whom the House of Delegates accorded a spontaneous standing ovation. Dr. A. V. Beacham, Magnolia, was recognized and the Speaker expressed the sorrow and grief of the House upon the recent death of Dr. Beacham's brother.

There being no further business, the Speaker returned the gavel to the President, Dr. Hicks. The Oath of Office was administered to Dr. Lawrence W. Long, President-elect, by the Chairman of the Board of Trustees, Dr. H. H. McClanahan, Jr., after which Dr. Long addressed the House. Dr. James Grant Thompson presented the Thompson Memorial Past President's Pin to Dr. Hicks. The President-elect, Dr. C. P. Crenshaw, was presented to the House and received a standing ovation.

The House of Delegates was adjourned *sine die* at 4:05 p.m. May 11, 1961. ★★★

MOBILE PROPOSAL

A recent traffic study showed that 25 per cent of the men who got married last year proposed while in a car. "This is further proof that more accidents happen on highways than anywhere else," commented the District of Columbia Traffic Safety Reporter.

Book Reviews

Progress in the Treatment of Fractures and Dislocations, 1950-1960. By Thomas B. Quigley, M.D., assistant clinical professor of surgery, Harvard Medical School, and Henry Banks, M.D., clinical associate in orthopedic surgery, Harvard Medical School. 102 pages. Philadelphia: W. B. Saunders Company, 1960. $2.50.

This short review of progress made in the past 10 years of treatment of fractures and dislocations in well worth the attention of the general practitioners and general surgeons for the purpose of acquainting them with the major accomplishments in this field. Those actively engaged in the treatment of these injuries are familiar with most of the views expressed by these traditionally conservative New England authors, but it must be remembered that just to operate is not necessarily a cure. There are still many occasions in which closed treatment is preferable to operative management and often in this field the follow-up care is just as important as the initial definitive treatment.

One of the major advances discussed in the book is intramedullary nailing of the femur. This procedure has been well established as a method of choice in properly selected cases of femoral shaft fractures although the technique does have numerous serious pitfalls and limitations. Similar techniques of intramedullary nailing for the tibia within certain well-defined limitations has also proved to be of great value. For this purpose a special Lottes, slightly curved nail has been developed. Intramedullary fixations of forearm fractures have a definite range of usefulness with some fairly well defined limitations. The authors of this book are somewhat opposed to open reduction and intramedullary pinning of clavicular fractures although there are many of us who disagree with this in adults.

One of the major accomplishments of the decade is increasing knowledge of the usefulness and limitation of metallic hip replacement prostheses. The authors and many practitioners feel that primary insertion of a prosthesis for fracture of the neck of the femur which cannot be well reduced in the elderly patient is indicated rather than risk of prolonged convalescence requiring repeated surgery for some of these complicated neck fractures in poor risk elderly patients. It is also useful in some of the complications of hip nailing.

It is also pointed out that acute injuries of the knee ligaments must be diagnosed and treated within a very few days of the knee injury in order to obtain good results. It has too long been the practice of coaches and others with inadequate knowledge of these serious injuries to simply observe and neglect the injuries for several days or weeks before finally deciding that there is a serious injury. By then it is too late to obtain a good result from a torn knee ligament.

Similarly, the authors stress that sprained ankles can be very severe injuries and that when in doubt should be examined and x-rayed in the strained positions under anesthesia to determine whether open repair of the ligament should be carried out immediately. Certainly, the archaic technique of injecting ankles with Novacain and sending them out to play has been abandoned by those with adequate knowledge of these injuries.

For those interested in trauma, the comments and opinions expressed by these authors are authoritative and well worth the short time required for reading this book.

THOMAS C. TURNER, M.D.

A Textbook of Pathology, seventh edition. By William Boyd, M.D., professor emeritus of pathology, University of Toronto; visiting professor of pathology, University of Alabama. Seventh edition. Cloth, 1,370 pages with 792 illustrations and 20 color plates. Philadelphia: Lea and Febiger, 1961. $18.00.

This is a thoroughly revised edition of Boyd's classical work that was first published in 1932 and has been studied by countless medical students. It has been published in several languages since then.

The current edition is divided into two parts: Part I is entitled *Principles of Pathology* and is intended for the "student of disordered biology" while Part II is *Regional Pathology* in which the author applies the principles of Part I to aid in

understanding and recognizing the lesions and disease processes in a given organ.

Part I, in addition to the previous chapters on inflammation and repair, neoplasia, bacterial and protozoon diseases, contains a stimulating chapter on immunity and hypersensitivity with discussions of auto-immunity and auto-immune diseases including the collagen and related diseases.

The general consideration of neoplasia includes up to date sections on precancerous lesions, the spread of tumors, the treatment of tumors as well as stimulating sections on etiology of tumors.

Finally, Part I is closed with a chapter, *Genetic Factors in Disease* including the genetic hazards of radiation and constitution in disease.

The remainder, approximately two-thirds, of the book is given over to the specific organs and their gross and microscopic chantes associated with disease processes peculiar to the organ as well as changes seen in systemic disease.

Boyd states, "For the student of Medicine, then, pathology has a threefold interest, for it comprises a study of: (1) structural changes, (2) disturbance of function, and (3) the relation of the lesions to the symptoms which represent disease in the patient." Regional pathology has been covered in that fashion and the paragraphs on the relation of the lesions to symptoms in connection with each disease process are most helpful.

Those who have used previous editions of Boyd will recall a certain charm in the "readability" of the text and the clearness with which principles are explained. None of that has been lost. Moreover, the format has been changed to two columns as a further aid in easing fatigue and increasing the speed of reading.

Boyd's *Textbook of Pathology* will be a helpful addition to the library of both student and practitioner.

THOMAS F. PUCKETT, M.D.

Saunders Company Lists Recent Publications

W. B. Saunders Company features the following recent books in their full page advertisement appearing elsewhere in this issue:

CHERNIACK AND CHERNIACK—RESPIRATION IN HEALTH AND DISEASE

Clearly explains the mechanisms by which pathological processes produce clinical findings in respiratory disease

FLUHMANN—THE CERVIX UTERI

Fully covers diagnosis, clinical manifestations, medical and surgical management

TENNEY AND LITTLE—CLINICAL OBSTETRICS

Authoritative management of 24 problems which currently cause difficulty in safe delivery

LETTERS

SIRS: Reference is made to the MSMA research study of the Relative Value Scale authorized by the House of Delegates in May 1960. This study was announced in the October 1960 JOURNAL in an article by Dr. S. Lamar Bailey. The question of further pursuit of this study was ordered by the May 1961 House of Delegates to be submitted to the membership for decision.

Following is a summation of my reaction:

Believing the time-honored physician-patient relationship constitutes the practice of private medicine, and thus must be preserved inviolate;

Believing the traditional practice of private medicine in America to have produced the best medical care the world has ever known;

Believing the medical service rendered a patient is a private contract solely between the patient and his physician;

Believing the physician to be responsible solely to his patient for the medical care given;

Believing the patient is the sole party responsible to recompense his physician;

Believing illness and accident insurance is a contract solely between the insurer and the insured and as such: (a) it obligates the insured to pay specified premiums in return for which, (b) it obligates the insurer to indemnify the insured against specified costs of illness or accident, but (c) to which the physician is not a party;

Believing that the patient, not the physician, is the party insured;

Believing that the insured, not the physician, is to be paid by the insurer;

Believing that the ability of the patient to pay a physician's fee is a matter for that physician and that patient to determine, and no one else;

Believing that whether or not a physician is rewarded financially for his services to a patient is of concern only to that patient and that physician, and specifically is not the business of insurance company, hospital, the government, union, or any other third party;

Believing the maintenance of the individual is the inherent responsibility of himself and his family;

Believing the maintenance of the indigent is the moral responsibility of his relatives, friends, kindhearted citizens (including physicians), and local charities, in that order;

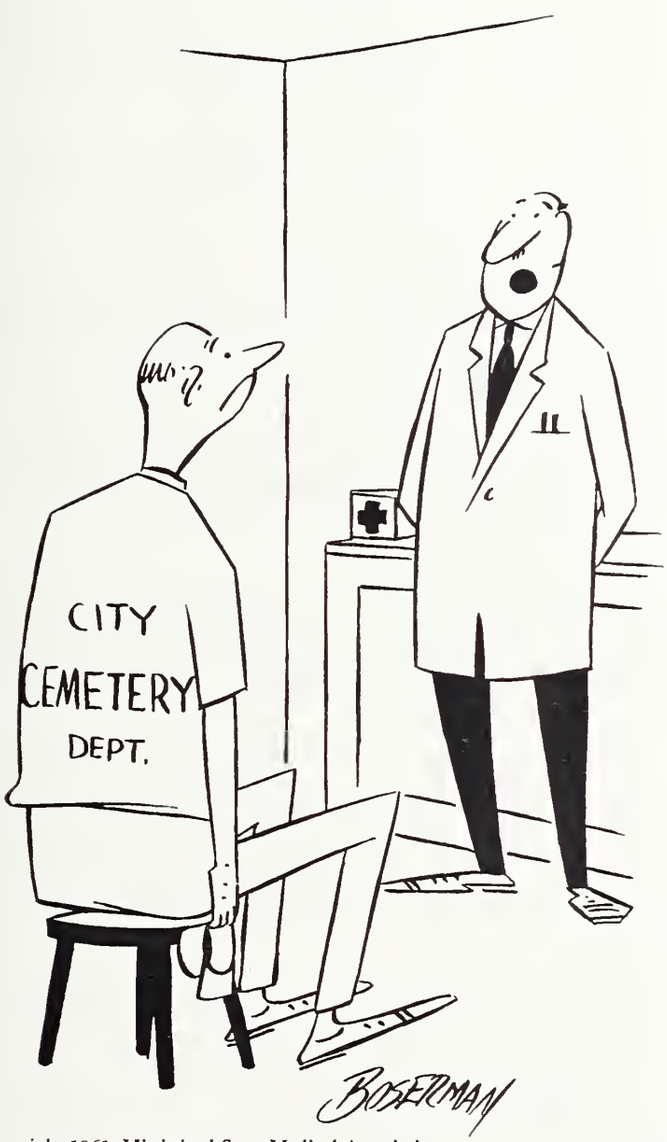
Believing that whether or not a charge is made by a physician for his services is a matter solely between him and his patient;

Believing that physicians always have, do now, and always will care for patients regardless of their financial status;

Believing no third party (government, insurance company, union, hospital, or what-have-you) is desirable, necessary, proper, or ordinary to the practice of private medicine;

Believing that the Relative Value Scale is in actuality a schedule of fees;

Believing that all fee schedules result in, and therefore are, third party intrusions;



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"I suggest you get out and dig in the dirt and plant things to get your mind off your ailments."

Believing third party intrusion destroys the patient-physician relationship;

Believing that fee schedules are used by insurance companies and other third parties to control the practice of medicine;

Believing that service contracts are the third party control of medical practice;

Believing that security rests in the confidence and innate resourcefulness within a person and is not a state bestowed by dole in exchange for freedom;

Believing that only physicians can render medical service;

Therefore, I:

Oppose the Relative Value Scale and all other schedules of fees;

Am opposed to the Mississippi State Medical Association conducting a Relative Value Scale study;

Request the MSMA to cease and desist in its research study on the Relative Value Scale;

Give notice that, in protest, I neither completed nor returned the RVS research questionnaire;

Go on record as declaring I will honor no such schedule of fees;

Retain and reserve the right to set my own fees in collaboration with my patients;

Will allow no third party to intrude itself into my practice;

Will accept no patient under a so-called service contract;

Will urge all physicians to steadfastly refuse enslavement via subsidies, security, assured fees, or other bribes by whatever name they are called; and

Challenge all physicians to uphold these principles without compromise, refusing to be led shortsightedly to endorse and cooperate in any intrusion, such as the Relative Value Scale, into their practice.

CURTIS W. CAINE, M.D.
Jackson, Mississippi

The President Speaking: 'A Ton of Coal'

(Continued from page 384)

costs money for rent or building ownership, secretaries' and nurses' salaries, drugs, expensive equipment, supplies, utilities, taxes, automobile expenses, and services—all before the doctor has a cent for himself or his family. If only overhead expenses were defrayed in care of the indigent, the physician would still be giving his services but not at the present loss.

What do you think should happen? ★★★

PERSONALS

MARSHALL B. ALLEN, JR. of Long Beach has received a special research fellowship according to the Office of the Surgeon General. The research is to be involved with the control of blood pressure mechanisms by the brain and will be carried out at the Hospital Henri-Rousselle in Paris, France. Dr. Allen received his medical degree from Harvard University in 1953 and interned at Jefferson Medical College Hospital, Philadelphia, Pa. He has spent one year on the staff at Mississippi State Sanatorium, one year in private practice in Houston, and expects to complete his residency in neurosurgery at the University Medical Center this year.

JOHN G. BATES has opened his office for the practice of general medicine in Mendenhall. Dr. Bates is a graduate of Tulane University School of Medicine and has recently completed his internship at the Baptist Hospital in Jackson.

PERRIN L. BERRY, Jackson, has announced his association with William Rosenblatt in a practice limited to cardiology.

JAMES R. CAVETT, JR. of Jackson has announced his return to practice in association with Drs. O'Ferrall, Safley & Williams. Dr. Cavett recently completed his residency in internal medicine at the University Medical Center.

LOUIS S. CHATHAM has joined the staff of the King's Daughters Hospital in Yazoo City as radiologist.

RICHARD H. CLARK, JR. of Hattiesburg has announced his association with Dr. Dawson B. Conerly, Jr., in the practice of surgery. A graduate of Tulane University School of Medicine, Dr. Clark interned at Charity Hospital in New Orleans. He completed his residency in general and vascular surgery on the Tulane Surgical Service at Charity Hospital. Dr. Clark was certified by the American Board of Surgery in May, 1960. Upon completion of his residency, Dr. Clark entered the U. S. Air Force and served as chief of surgical services at the 32nd USAF Hospital, a regional Air Force hospital, in Minot, N. D.

WILLIAM RODNEY CLEMENT, a native of Pontotoc, has begun the practice of medicine in association with the Pontotoc Clinic. Dr. Clement received his B.S. degree from Millsaps College, his M.D. degree from Tulane University School of Medicine, and interned at Charity Hospital in New Orleans. He served with the United States Air Force from 1958 until June 1961 and was stationed at Norton Air Force Base in California. He spent two years on the general surgical service and one year as chief of the outpatient clinic. Dr. Clement received the Air Force Commendation Medal on June 9.

T. G. CLEVELAND of Meridian has been appointed to the Board of Trustees for State Training Schools. The appointment was made by Governor Ross Barnett. Dr. Cleveland will fill the unexpired term of Dr. C. P. Crenshaw of Collins who resigned after being named president-elect of the Mississippi State Medical Association.

WAYNE COCKRELL was recently named president of the newly organized Magee Jaycees.

CHARLES COOPER, who has practiced medicine in Fayette for the last year, has closed his offices to enter a residency in anesthesiology at the University Medical Center.

JOE T. DOWNARD has been installed president of the Laurel Exchange Club. James C. Waites was named a member of the Board of Directors.

A. F. DUGGER, JR. has opened his offices in Waynesboro. A graduate of the University of Mississippi School of Medicine, Dr. Dugger interned at the U. S. Naval Hospital, Portsmouth, Va.

PAUL E. EDWARDS, a native Mississippian who has just completed his internship at St. Thomas Hospital in Nashville, has moved to Shannon to take over the Shannon Clinic. Dr. Edwards is a graduate of the University of Mississippi School of Medicine.

JOHN FRAIZER has been installed as first vice president of the Columbus Lions Club.

A. L. GRAY, ARTHUR GUYTON, and A. GAYDEN WARD, all of Jackson, addressed the 79th Annual Convention of the Mississippi State Pharmaceuti-

cal Association which met June 19-21 at the Edgewater Gulf Hotel. Rowland B. Kennedy, executive secretary of MSMA, was also a speaker at the meeting.

JOSEPH C. GRIFFING has been named radiologist at Crosby Memorial Hospital in Picayune. Dr. Griffing received his premedical training at Louisiana State University and was graduated from the Tulane University School of Medicine. He interned at Charity Hospital in New Orleans and took his residency in radiology at the Southern Baptist Hospital in New Orleans and at Charity Hospital.





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ALVIN HALE

FRED D. HILL of Hattiesburg has announced the association of John A. McLeod in the practice of anesthesiology.

HENRY HOLLEMAN has been named president of the Columbus Rotary Club for the coming year.

JAMES M. HOWELL was awarded the Howell Crosby Cup by the Picayune Rotary Club in a recent meeting as "the person who in his daily life most nearly exemplifies the true spirit of Rotary." Dr. Howell served as president of the organization during the last year.

BEN KITCHINGS has been named a member of the Long Beach Lions Club board of directors.

JAMES A. LAUDERDALE and WILLIAM G. RILEY of Meridian have announced their association for the practice of pediatrics.

J. L. LEVY of Clarksdale has been named medical examiner and surgeon by the city's newly elected Board of Mayor and Commissioners. Dr. Levy has practiced medicine in Clarksdale since 1929.

ROBERT P. MYERS of Jackson has announced the opening of his office for the practice of medicine.

CHARLES R. PYLE and GERALD M. WALDEN have announced the opening of their office at Plain for the general practice of medicine.

GUY ROBINSON has been named a director of the Indianola Lions Club.

LESLIE RUSH was featured as "Citizen of the Week" in the June 22 issue of *The Leader* in Meridian.

CHARLES D. SCRUGGS of Jackson has announced his association with Onnie P. Myers in the practice of urology.

J. K. STEPHENS of West Point has announced his association with J. R. Mullens, Jr., J. R. Powell, and H. M. Lee in a practice limited to diseases of infants and children and adolescents. Dr. Stephens received his medical degree from Tulane University and interned at the University Medical Center. He completed his residency in pediatrics at the University of Alabama Medical Center in Birmingham, where he has been chief resident for the past year.

EDSEL F. STEWART, who has been in the general practice of medicine at Gloster Clinic for the past nine years, has announced the closing of his prac-

tice to enter a residency in obstetrics and gynecology at Tulane University School of Medicine and Charity Hospital at New Orleans.

KURTZ B. STOWERS has announced the opening of his office in association with W. K. Stowers in the practice of surgery in Natchez.

FASER TRIPLETT has been named to serve as the Clarksdale-Coahoma Health Center clinician until he is called for military service. A graduate of Tulane University School of Medicine, Dr. Triplett has just completed his pediatric residency at the University of Tennessee College of Medicine.

DAYTON E. WHITES has announced his association with Raymond Tipton at the Lucedale Medical Clinic. Dr. Whites received his B.S. degree from Millsaps College and his M.D. degree from the University of Mississippi School of Medicine in 1960. He interned at Greenville General Hospital, Greenville, S. C.

JACK WILSON of Hollandale has been sworn into office as one of the town's five aldermen.

E. L. WHITFIELD of Florence has been named to the Board of Directors of the Rankin County Chamber of Commerce.

DEATHS

CARRUTH, HENRY LEWIS, Kokomo. M.D., University of Illinois College of Medicine, Chicago, 1910; interned Cook County Hospital, Chicago, Ill.; died June 11, 1961, aged 78.

HENINGER, BEN RUFUS, Gulfport. M.D., Tulane University School of Medicine, New Orleans, La., 1916; interned Touro Infirmary, New Orleans, La., one year; residency Touro Infirmary, New Orleans, one year; Fellow of the American College of Pediatrics; member, American Medical Association and American College of Cardiology; died May 2, 1961, aged 68.

KLEIN, K. T., Meridian. M.D., Tulane University School of Medicine, New Orleans, La., 1906; interned Turner Hospital, Meridian; postgraduate work at New York Post Graduate School, Chicago Post Graduate School, Tulane University, and Bellevue Hospital; served as first lieutenant in the Medical Corps during World War I; president, Lauderdale County Medical Society; vice president, Association Southern Railway Surgeons; Fellow of the American College of Surgeons; emeritus member of MSMA and member Fifty Year Club; died June 22, 1961, aged 77.

NEW MEMBERS

The following physician has been elected to membership by his respective component medical society in the Mississippi State Medical Association and the American Medical Association:

MITCHELL, CHARLES FRANKLIN, Brandon. Born Philadelphia, Pa., May 23, 1925; M.D., University of Mississippi School of Medicine, Jackson, 1957; interned Mobile County Hospital, Mobile, Ala.; U. S. Navy, two years; elected March 7, 1961, by Central Medical Society.

State Morbidity Reported Through June 9

The Mississippi State Board of Health reports the following occurrence of morbidity for 1961 through the 23rd week of the year, ending June 9. Case totals reported are shown opposite the disease condition.

Tuberculosis, pul.	309
Tetanus	2
Heptatitis, inf.	811
Helminthic inf.	
Hookworm	640
Ascariasis	141
Strongyloides	10
Infection, strep.	
Scarlet fever	132
Strep. throat	1,073
Pertussis	24
Measles	1,103
Chickenpox	692
Infection, mononucleosis	48
Diarrhea of newborn	4
Mumps	521
Influenza	438
Gonorrhea	2,894
Syphilis	
Early	136
Late	126

Barnett Terms King-Anderson Bill 'a Cruel Hoax' In Talk to 53rd Annual Governors' Conference

Mississippi's Governor Ross R. Barnett told the 53rd Annual Governors' Conference in Honolulu, Hawaii, that the King-Anderson proposal for compulsory health care of the aging under Social Security is a "cruel hoax" which ". . . will become socialized medicine for every man, woman, and child in our great republic." The statement was made during the four day conclave of chief state executives meeting for the first time in the mid-Pacific state.



Barnett . . . "more security in opportunity than in dependency."

"In Mississippi," Governor Barnett declared, "we have reason to be proud of and to repose confidence in our splendid system of hospitals, in our medical profession, in those professional individuals who work with both, and in the people themselves who want only the opportunity to take care of their own. We believe that we should help those who need help and we feel that we should not take tax dollars—federal or state—for programs of care for those who need no assistance."

Hitting hard at the liberal King-Anderson measures, H.R. 4222 and S. 909, the Governor said that ". . . we oppose any program of health care under Social Security with its burdensome tax load upon wage earners and employers, its centralized management with no local prerogatives, its restricted application to the aged themselves, and the threat it poses to our free economy."

The major address to 47 of the 50 governors present stressed the extravagance, inadequacy, and lack of necessity for the Forand-type proposal, up before the Congress with liberal sponsorship for the fourth consecutive year.

"For those who really need help," the Governor said, "this is a cruel hoax. It requires those in need to pay as much as $90 for admission to a hospital in addition to the new and additional taxes which would be levied." He described implementation of the Kerr-Mills program in Mississippi, adding that ". . . we provide this care with full respect for the dignity of each individual and I challenge anyone to demonstrate that a single citizen of Mississippi who requires medical care is unable to receive it."

He warned that the Social Security program will mean poorer—not better—health care for senior citizens and that federal employees will be telling our states, our hospitals, and our doctors what treatment they can provide. He pointed out that the Kerr-Mills program can and will do the job.

"The Social Security plan will lead to the decline—if not to the end—of private health insurance in which 128 million Americans are now active participants," Governor Barnett added, and the Kerr-Mills program is voluntary, not compulsory." He said it would supplement, not supplant, voluntary health insurance and that the Congress, in passing this law, wisely and logically expressed the belief that each state knows its own particular problems better than the federal government. Barnett affirmed that he was ". . . not elected Governor of Mississippi to preside over the liquidation

of human freedom" and that Mississippians believed that there is more security in opportunity than in dependency.

The Magnolia chief executive, in another major address, led a floor fight against federal aid to education. The tenor of the conference was a marked reversal from the 1960 meeting when a majority voted for Forand-type legislation. No such vote was taken at the Hawaii meet. The Governor was accompanied by his family and Lt. Governor and Mrs. Paul B. Johnson, Jr., to the islands.

UT Professor Addresses West Society

Dr. Phil C. Schreier, professor of obstetrics and gynecology at the University of Tennessee, was the guest speaker for West Mississippi Medical Society's July 11 meeting. Dr. Schreier's subject was "Ovarian Tumors." The meeting was held at the Old Southern Tea Room in Vicksburg. During the business session the society's delegates to MSMA's 93rd Annual Session gave their report.

MSD Postgrad Program Biggest in '60

Officials of the Merck Sharpe and Dohme company reported new gains in the firm's postgraduate program for 1960. The formal report, just released, details activities in supporting postgraduate professional education in local and state medical societies, hospitals, medical schools, and among those engaged in professional communications programs.

Lectures were supported in 30 medical schools and before 300 state and local medical groups in 37 states. The Mississippi State Medical Association is among MSD postgraduate program participants, introducing the lecture series during the recent 93rd Annual Session.

Other activities included formal courses supported by 19 grants in 14 states, medical research conferences, open circuit television programs, and special studies. Professional films are also a significant portion of the program, the report stated.

MSMA component medical societies interested in the postgraduate program may secure details from the Council on Medical Education by communicating with the Central Office at Jackson.

Journal MSMA Places Third in International Contest

The JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION has been named third place winner in its category in the 1960-61 Evaluation and Awards Program of the International Council of Industrial Editors.



The Committee on Publications examines JOURNAL MSMA's *award of excellence. Seated left to right are Drs. B. B. O'Mara, Lawrence W. Long, and William E. Lotterhos. Standing are Dewitt W. Hamrick, William Moncure Dabney, and C. G. Sutherland.*

In competition with 670 entries, the JOURNAL was one of 37 to receive recognition. No first place award was given in JOURNAL MSMA's classification of Publications with 25-75 Per Cent Advertising. The Louisiana Forestry Association's magazine, *Forests & People,* took second award in this group.

The International Council of Industrial Editors is a nonprofit organization of associations and chapters of industrial, business, association editors and communications people. Its more than 3,200 members are located in all parts of the United States as well as Europe, Canada, India, Australia, Mexico, and the Philippines.

JOURNAL MSMA is a member of the local ICIE member organization, the Industrial Editors Association of Mississippi.

In evaluating the JOURNAL, the judges commented, "This is one of the most impressive publications seen in a long time. The chore of the evaluators was in trying to avoid giving too perfect a score. The magazine adheres admirably to stated policy."

Additionally they wrote, "The content balance is excellent. The JOURNAL makes association policy clear and editorial objectives sharp and fully understandable."

The third place award was a certificate of excellence containing the ICIE emblem, the signatures of ICIE officials, and statement of the JOURNAL's evaluation in the contest.

Whitfield Adds Six Doctors In Recent Staff Increase

Four physicians and two psychiatrists along with 12 other new staff members have been appointed to the Mississippi State Hospital at Whitfield giving the institution the largest staff in its 26-year history.

The appointments came as the patient load climbed to 4,352, or almost 200 more than the daily average of 4,184 in the fiscal year ending June 30, 1959. The new staff members were added at a total annual cost of $121,200.

The $7,560,000 current appropriation for the biennium which ends a year from now was based on estimates made from the 1959 budget period.

Dr. W. L. Jaquith, hospital director, said the staff additions were made possible, in part, by reshifting certain budget items.

"This gives us the biggest staff in the history of the hospital," he said, "but we're getting new patients at a terrific rate, about double the daily average of six months ago."

Physicians added are Drs. Charles D. Burgess, William Hilbun, Henry Ray Nail, and Gary A. Sneed. New psychiatrists are Drs. Reginald P. White and Dean Eleftery.

Dr. James Stary was appointed director of the department of psychology. New director of recreation is Hugh Tatum with J. B. Keith, Jr., as his assistant.

Also appointed to executive posts were these registered nurses with master of science degrees:

Miss Barbara Techer, director of nurses; Mrs. Doris Chaves, director of in-service training, and Mrs. Alma Petty, director of psychiatric affiliation program.

Other nurses employed were Mrs. Patricia Tatum, Mrs. Peggy Marrs, Mrs. Billy Jo Anderson, Miss Mary Sturdivent, Miss Eva Drasdo, and Miss Sally Montgomery.

Employment of the nurses was to expand the hospital's own nurses' training program.

Several of the 18 new appointees, including the registered nurses and graduates of the University Medical Center training program, will not begin work until September 1, according to Dr. Jaquith.



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"But it can't be measles, I have diplomatic immunity."

Admits Illegal Practice: Says 'Wanted to Be Doctor'

George Edwin Allen of Columbia, Miss., who "always wanted to be a doctor," has pleaded guilty to a charge of practicing medicine without a license in Smith County. Allen appeared before Justice of the Peace H. Grady Russell on June 30 and was fined $200.

The 27-year-old Allen posed as a licensed physician to an established doctor who was closing his practice to enter military service. After purchasing the physician's equipment and practice for an amount in excess of $1,000, Allen moved his wife and six-weeks-old baby in anticipation of opening his office.

The district attorney's office and the county health department began investigating Allen when former classmates of his at Jones Junior College recognized him and expressed doubt that he was a physician. When confronted, Allen admitted that he had no license.

Earlier in June, Allen had approached a south Mississippi physician giving what purported to be references and asking to use his office to study and "bone-up" on "rusty" subjects. Allen claimed

he was just out of military service. Later he was found to have taken numerous personal possessions from the physician including his nameplate and initialed prescription pads.

Allen volunteered to undergo examinations at the State Hospital at Whitfield, where he was declared sane.

Bond Election for Hinds Hospital Scheduled Aug. 1

Hinds County voters will go to the polls Aug. 1 to pass judgment on a bond election authorizing funds for a new 216 bed hospital in Southwest Jackson.

The $3,750,000 hospital, if approved, will be located near Leavell Woods and will serve south and mid-county residents including Jackson, Raymond, Clinton, Terry, Byram, Bolton, Edwards, and Utica.

MSMA President Dr. Lawrence W. Long has gone on record in favor of the proposed institution, pointing out that "Jackson has experienced a population growth during which our best efforts in hospital construction and expansion haven't been quite sufficient. Understandably, we have wisely avoided overtaxing our present fine hospitals with overexpansion and this is a factor in the excellence of our existing institutions among which all major facilities are fully accredited."

Dr. Long pointed out that the new facility would greatly assist the county in discharging its responsibilities in caring for indigent patients through a mutually satisfactory cooperative program with Jackson and other Hinds County physicians.

"May it never be said that a resident of Hinds County died tomorrow for want of a hospital bed he failed to build today," said Dr. Long.

If approved, the Hinds County General Hospital, as the institution will be named, will be built without use of federal funds. A tax increase of one-tenth of a mill will be necessary to finance the 3 million dollar bond issue for the hospital.

The hospital is expected to operate under a deficit of $300,000 during the first year, according to John Putnam, attorney for the Hinds County Board of Supervisors. Putnam said the facility should become self-sustaining within five years. He estimated that between five and 15 per cent of the hospital's patients would be charity. This is the standard used commonly under the Hill-Burton plan.

As planned, the hospital will contain 216 beds, of which 120 will be single rooms and 96 double rooms. It is to be staffed by qualified Hinds County physicians and operated through a board of trustees appointed by the County Board of Supervisors.

The opening date is tentatively set for some time in 1964. Developing of the building plans will require approximately one year after approval of voters in the bond election followed by two years of actual construction time from letting of the contracts.

TB Group Names Seven Doctors to Committees

Seven physicians have been named to key committees of the Hinds County Tuberculosis Association, according to Miss Dee Chastang, executive secretary.

All appointments were made by Ray Edwards, president, who heads up the executive committee.

Dr. J. L. Wofford will serve as chairman of the Health Education Committee with Dr. H. K. Stauss acting as co-chairman. Dr. Cecil Jenkins and Dr. John Wofford are committee members. All are from Jackson.

The Case Finding Committee will be headed by Dr. George E. Riley with Dr. C. F. Landrum of Edwards and Dr. C. L. Hester, Jr., of Raymond as committee members.



"Now remember. By the light of the first full moon."

Women Are Weaker Says Health Insurance Institute

It may come as a surprise but women really are the weaker sex—at least as far as acute health conditions are concerned.

Although the life expectancy of females is six years more than for males, along the way the average woman can expect to suffer acute health conditions more frequently, resulting in a greater number of days of restricted activity and bed confinement, according to the Health Insurance Institute. The Institute based its findings on an analysis of data from the U. S. Public Health Service.

In the period of one year, 368 million acute health conditions were reported in the U. S. These conditions, with certain exceptions, are defined as those which last less than three months and which involve either medical attention or restricted activity.

In the surveyed year, women suffered 197 million acute conditions to 171 million for men. This worked out to a rate of 224 conditions for every 100 women, and 205 conditions for every 100 men.

However, the average woman suffered 9.4 days of restricted activity as a result of these conditions compared to 7.5 days for the average man, and also incurred 4.0 days of bed confinement to the male's 3.2 days.

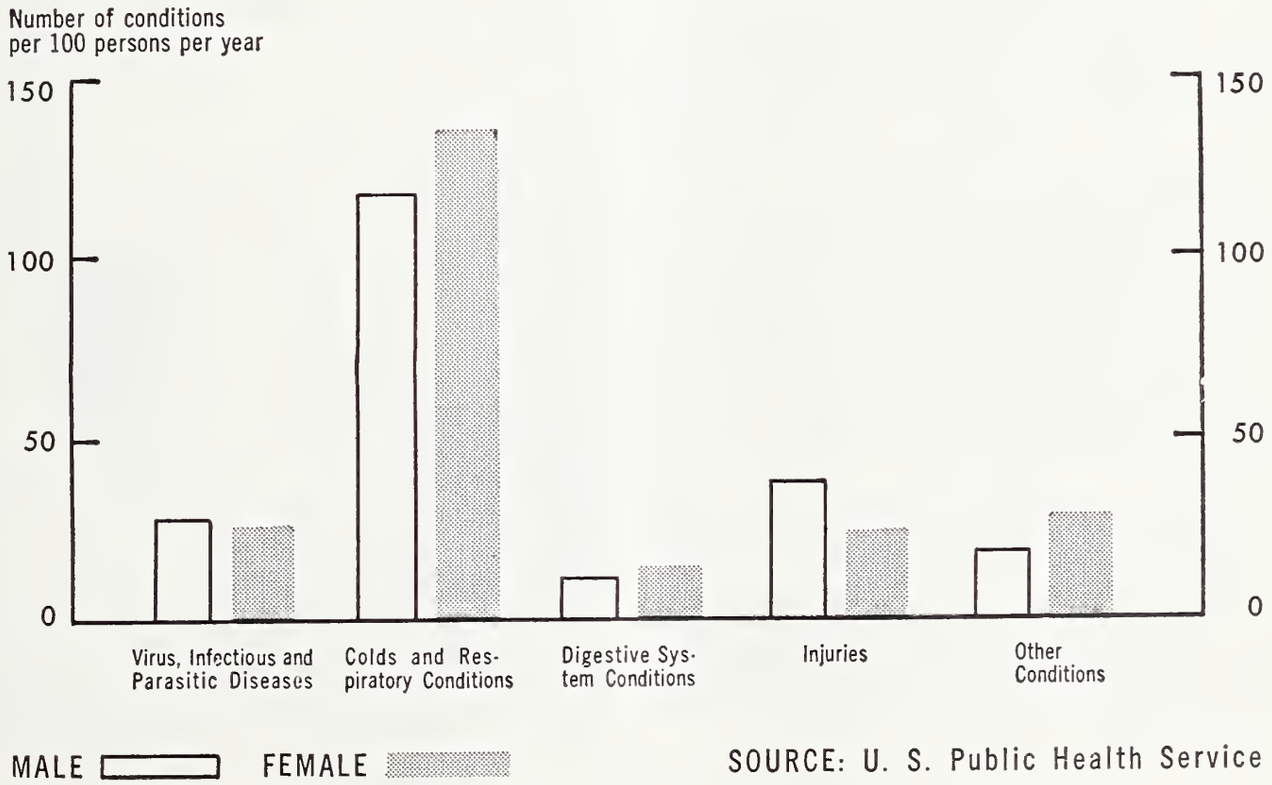
Women are not ahead of men in all categories of acute health conditions. The survey showed that men more frequently suffered from infectious and parasitic diseases (including viruses), and injuries, while women led in respiratory conditions (including colds), digestive system conditions, and a catch-all category known as "other conditions."

For every 100 men, there were 27 cases of infectious and parasitic diseases, and 35 injuries, compared to 25 and 23, respectively, for every 100 women.

On the other hand, for every 100 women there were 136 respiratory conditions reported (including 72 common colds), and 13 digestive system conditions. Every 100 men suffered 115 respiratory conditions (62 of them colds), and 11 digestive system conditions.

In terms of actual number of conditions suffered, women reported 22 million infectious and parasitic diseases, 120 million respiratory conditions, 11 million digestive conditions, 20 million injuries and 24 million other conditions, for a total of 197 million acute conditions. The totals for men were, respectively, 22 million, 96 million, nine million, 29 million, and nearly 15 million, for a total of 171 million, and a combined total of 368 million acute conditions.

ACUTE ILLNESS IN MEN AND WOMEN



SOURCE: U. S. Public Health Service

State Hospital Association Meets for Annual Convention

The Mississippi Hospital Association met July 12-14 at the Buena Vista Hotel in Biloxi for its 30th annual convention.

The association has a membership of 120 institutions employing over 12,000 persons. Other hospital groups meeting concurrently with MHA were the state medical record librarians, hospital accountants, nurse anesthetists, hospital auxiliaries, and the Mississippi Catholic Hospital Conference.

The convention program emphasized new administrative procedures and cost-reduction systems. Nationally known leaders in the medical and hospital field addressed the three-day convention.

Speakers participating in the administrative section of the program were Dr. David B. Wilson, director, University Hospital, Jackson; Ray E. Brown, superintendent, University of Chicago clinics, Chicago, Ill; Frank S. Groner, president, American Hospital Association, administrator, Baptist Memorial Hospital, Memphis, Tenn.; John W. Gill, business manager, the Street Clinic, Vicksburg, and C. O. Trenor, member, house of representatives, Houston.

Topics discussed covered proposed hospital legislation, automation in hospitals, pharmacy practices, and nursing procedures.

Other convention speakers were Richard C. Williams, executive director, Mississippi Hospital and Medical Service, Jackson; Claude Lollar, administrator, Field Memorial Community Hospital, Centreville; Dr. George Thomas, professor and chairman, section on anesthesiology, University of Pittsburgh, Pittsburgh, Pa.; Ruth Werner, director of nursing service, University Hospital, Jackson; Sister Mary Carl, St. Dominic's Hospital, Jackson; H. J. Blackledge, assistant administrator, Jones County Community Hospital, Laurel; John A. Neill, member, house of representatives, Laurel, and William Caraway, member, senate, Leland.

Highlight of the annual banquet was the appearance of Linda Lackey, Forest, 1961 Maid of Cotton.

H. Dean Andrews, administrator, Vicksburg Hospital, was installed as president of the association. He succeeds Reed B. Hogan, administrator, Coahoma County Hospital, Clarksdale.

Northeast Medical and Dental Groups Hold Joint Meeting

The Northeast Mississippi Medical Society and the Northeast Dental Society held their first joint meeting in 30 years to hear William McAuliffe of the legal department of the American Medical Association.

McAuliffe talked on defense and precautionary measures against charges of malpractice. The meeting was held June 13 at the Rex Plaza Hotel in Tupelo.

Dr. C. P. Crenshaw of Collins, MSMA's president-elect, also addressed the group.

AHA Arteriosclerosis Council To Meet Oct. 18-20 in Miami

The Council on Arteriosclerosis of the American Heart Association will hold its Annual Meeting Oct. 18-20 at the Hotel Balmoral, Bal Harbour, Miami Beach, Fla., immediately preceding the AHA's annual Scientific Sessions in the same city, Oct. 20-22.

All interested physicians, whether or not they are members of the council, are invited to attend the sessions. Further information on the meeting may be obtained from Dr. Jeremiah Stamler, Chicago Board of Health, 54 West Hubbard St., Chicago 10, Ill., or from the American Heart Association, 44 East 23rd St., New York 10, N. Y.

Pre-retirement Program Set for Aging

The Mississippi Council on Aging has initiated a new series of pre-retirement seminars for state employees and first sessions are being conducted for personnel of the Mississippi Highway Department. The entire seminar series includes five meetings with each lasting about two hours.

Program participants include physicians, bankers, insurance counselors, architects, social workers, employment consultants, dieticians, recreation directors, attorneys, and ministers. Object of the program is to prepare registrants for "gainful retirement" during senior years.

Subject areas of the lecture-discussion series, officials of the Council on Aging said, are retirement income and financial planning, mental and physical health during retirement, non-employment activities among which are religious, social,

and recreational aspects, housing, and legal matters of concern to retired persons.

Council officials report favorable response to pilot seminars and plan to expand the program to other groups.

Medical Record Librarians Convene in Biloxi

The Mississippi Association of Medical Record Librarians met July 12-14 at the Buena Vista Hotel in Biloxi for its annual convention.

The program was held concurrently with the meeting of the Mississippi Hospital Association.

Featured speakers included Dr. Leonard W. Fabian, professor and chairman of the department of anesthesiology of the University of Mississippi School of Medicine, Dr. Wilbur L. Kenoyer, USAF Hospital, Keesler AFB, Biloxi, Dr. Kenneth B. Babcock, director of the Joint Commission on Accreditation of Hospitals, Chicago, and Howard McDonnell, Biloxi attorney and member of the State Board of Legal Examiners.



Copyright Mississippi State Medical Association

"Am I hoping for a boy or a girl? Yes."

American College of Surgeons Announces October Meet

Latest applications of surgical research and new surgical techniques will be described at the world's largest meeting of surgeons, the 47th annual Clinical Congress of the American College of Surgeons, in Chicago Oct. 2-6, 1961.

More than 11,000 surgeons and physicians, from all over the United States, Canada, and many foreign countries are expected to attend this widely instructive five-day meeting. Approximately 1,000 doctors will take part in the program of nine postgraduate courses, 258 new research reports from medical centers throughout the country, 68 medical motion pictures, 26 cine clinics, 14 operative telecasts from Billings Hospital of the University of Chicago, and 300 scientific and industrial exhibits.

Dr. John T. Reynolds, Chicago, clinical professor of surgery, University of Illinois College of Medicine, is chairman of the committee on local arrangements.

Major addresses will be made by Dr. Robert M. Zollinger, Ohio State University College of Medicine and incoming president of the College, speaking on "Surgical Tithing," Dr. Francis D. Moore, Harvard Medical School, giving the annual Baxter Lecture on "The Control of Effective Volume and Tonicity; Body Composition," and Dr. Preston A. Wade, Cornell University Medical School, presenting the annual Trauma Oration, "The Specialist and the Injured Patient."

This year's historic Martin Memorial Lecture, commemorating the College founder, Dr. Franklin H. Martin, will be given by Admiral Hyman G. Rickover.

Honorary Fellowships will be awarded to four distinguished surgeons: Sir Arthur Porritt, London, president of the Royal College of Surgeons of England; Dr. Jean-Louis Lortat-Jacob, professor of surgery, University of Paris; Dr. Fritz Linder, professor of surgery, Free University of Berlin; Dr. Jack F. E. Adams-Ray, professor of surgery, Karolinska Institute, Stockholm. Two Distinguished Service Awards will be given and more than 1,050 surgeons will become Fellows of the College (F.A.C.S.) at convocation ceremonies.

Nine postgraduate courses will be headed by surgeon-teachers prominent in their fields: pre- and postoperative care, James D. Hardy, Jackson, Miss.; gastrointestinal disease, Stanley O. Hoerr, Cleveland; diseases of liver, biliary tract, pan-

creas, Ben Eiseman, Louisville; cardiovascular surgery, Ivan W. Brown, Durham; injury of joints of upper extremity, Sam W. Banks, Chicago; obstetrics and gynecology, David Danforth, Evanston, Ill.; cancer chemotherapy, Harry S. Morton, Montreal; thoracic surgery, Hiram T. Langston, Chicago; recent advances in pediatric surgery, H. William Clatworthy, Jr., Columbus.

Dr. William P. Longmire, Jr., Los Angeles, presides over a session on "What's New in Surgery," assisted by authorities in each specialty: neurological surgery, William H. Sweet, Boston; gastrointestinal biliary conditions, Edward R. Woodward, Gainesville, Fla.; plastic surgery, Truman G. Blocker, Jr., Galveston; tumors, William D. Holden, Cleveland; anesthesia and pulmonary problems, William S. Blakemore, Philadelphia; cardiovascular surgery, C. Rollins Hanlon, St. Louis; orthopedic surgery, William Stanley Smith, Columbus, Ohio.

Dr. Harrison L. McLaughlin, New York, will lead a trauma symposium covering tetanus prophylaxis, present status of plastic polymers in fracture treatment, prevention and care of atheletic injuries, and causes of death following trauma. Dr. R. Lee Clark, Houston, will lead a cancer panel on "Alterations in the Hormonal Balance of the Cancer Patient."

Thyroid disease, emergency department problems in trauma, facial injuries, skin grafts, head injuries, viral infections in pregnancy, knee joint fractures, duodenal ulcer, diseases of the spleen, cerebral vascular insufficiency, and tumors of the kidneys are additional surgical problems to be discussed by specialists.

Dr. I. S. Ravdin, Philadelphia, is retiring president of the College. Dr. John Paul North, Chicago, is the director. Headquarters for this meeting is the Conrad Hilton, with some sessions at nearby Loop hotels.

Interstate Postgraduate Association Sets Meet

The Interstate Postgraduate Medical Association of North America will meet Nov. 13-16 in Cleveland, Ohio.

The four day annual meeting will feature a number of speakers and color TV presentations.

Additional information and registrations forms may be obtained from Roy T. Ragatz, executive director, Box 1109, Madison 1, Wisconsin.

Jaquith Named Chairman Of New Study Committee

Dr. W. L. Jaquith, Whitfield, director of the Mississippi State Hospital, Whitfield, has been named chairman of a nine member committee to study needs in Mississippi for psychiatric services for children. The committee was appointed by Governor Ross R. Barnett and charged with reporting to the chief executive before the 1962 regular session of the legislature.

Two other physicians, Dr. Frank M. Davis, Corinth, and Dr. T. G. Cleveland, Meridian, are among the appointees. Other members include Mrs. Clara Sekul Hornsby, Biloxi; Senator Hayden Campbell, Jackson; Judge Luther Maples, Gulfport; A. A. Roebuck, Hazlehurst; Sebe Dale, Jr., Columbia; and Mrs. Bill Vollar, Vicksburg.

In naming the group, Governor Barnett stated that ". . . for many years, I have realized that this is one of the greatest needs in the state. There are many children in our state who can be rehabilitated to take their rightful places in society.

"I have been interested in this matter over a long period and have found out through investigation," the governor continued, "that where facilities are available, many retarded children are saved from an abnormal life in a mental hospital."

Dr. Jaquith, chairman of the committee, has been active in state medical association work in important committee capacities.

132 Million Persons Now Have Health Insurance

Some 132 million Americans—73 per cent of the civilian population—had health insurance at the end of 1960, according to the Health Insurance Council's 15th annual survey on the extent of voluntary health insurance coverage in the United States. The survey is based on reports from insurance companies, Blue Cross-Blue Shield, and other health care plans.

The Council said both the number of persons covered by some form of health insurance and the amount of benefits paid reached new highs last year. Coverage increased by 4.1 million during 1960 to reach a total of 131,962,000 persons.

Benefit payments by all health insuring organizations to help cover the cost of hospital,

surgical, and medical care amounted in 1960 to more than $4.8 billion, up $500 million over 1959. In addition, persons with loss-of-income policies received $839 million in benefits from insurance companies to replace income lost through disability.

Thus, a grand total of $5,688,000,000 in health insurance benefits were distributed during 1960, up 10.1 per cent over 1959.

The HIC, a federation of eight insurance associations, said that based on early trends for 1961 it estimated that as of June 1, 1961, some 134 million persons (74 per cent of the civilian population) had hospital expense insurance, 123 million had surgical expense insurance, 89 million had regular medical expense insurance, 31 million had major medical expense insurance, and 42.5 million were insured against loss of income, or had some other formal sick leave pay arrangement.

As of June 1, the Council said, 92 per cent of persons with health insurance had both hospital and surgical expense insurance, and 66 per cent had hospital, surgical, and regular medical expense insurance, which helps pay for doctor visits for nonsurgical care. Five years ago, the figures were, respectively, 85 and 52 per cent.

Hospital expense insurance was provided by insurance companies to 78,885,000 persons; by Blue Cross-Blue Shield and similar groups to 58,050,000, and by other health care plans to 5,542,000. After deducting persons protected by more than one type of insuring organization, the Council reported that 131,962,000 persons had hospital insurance, a 3.2 per cent increase over the 127,896,000 persons so covered at the end of 1959.

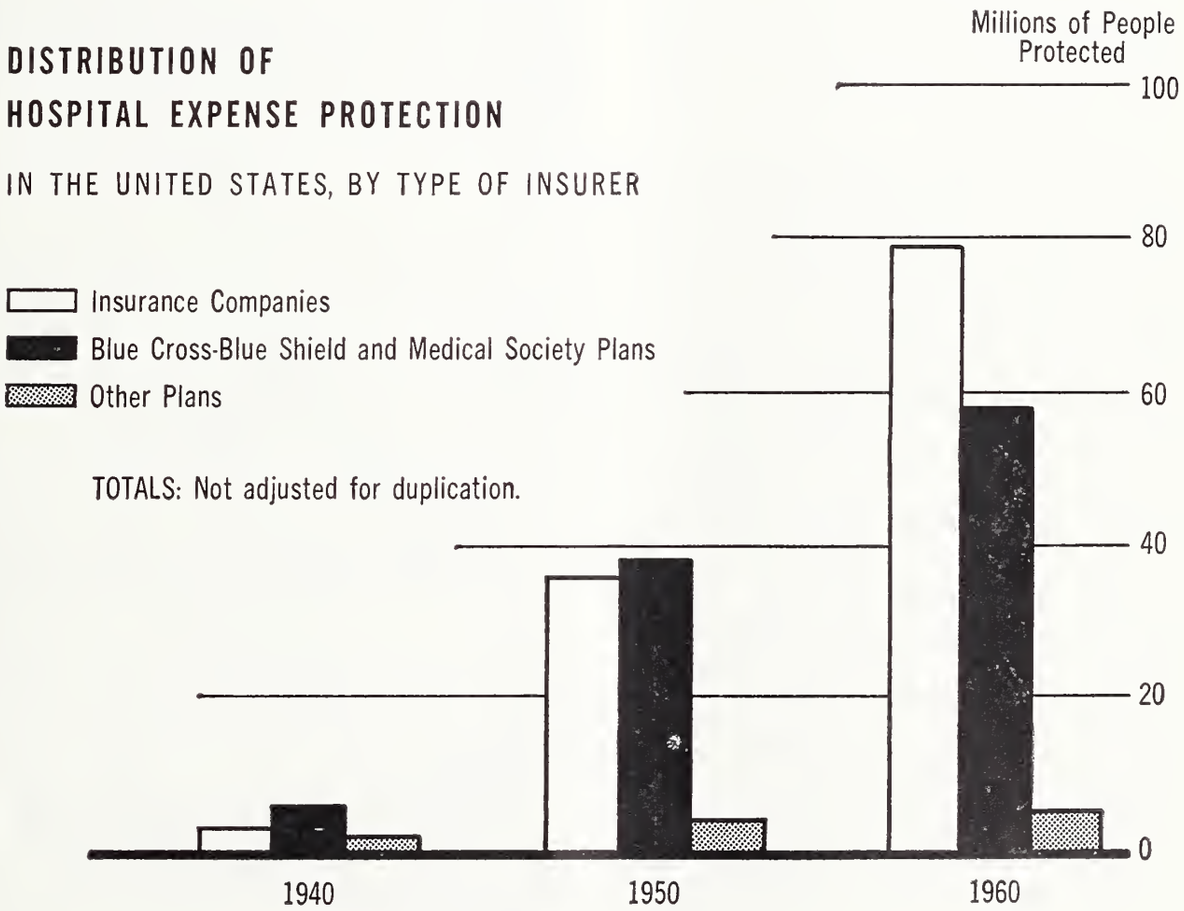
Surgical expense insurance by insurance companies covered 75,305,000 persons, by Blue Cross-Blue Shield and similar groups 50,281,000, and by others 6,573,000. Allowing for duplication, 121,045,000 persons had surgical insurance, a 3.5 per cent boost over the 116,944,000 persons of 1959.

Regular medical expense insurance accounted for 45,017,000 persons through Blue Cross-Blue Shield and similar groups, 41,312,000 through insurance company programs, and 6,773,000 through other plans for a total, eliminating duplications, of 87,541,000 persons, a 6.0 per cent climb over the 82,615,000 persons in 1959.

Major medical expense insurance coverage through insurance company programs increased 25.6 per cent, from 21,850,000 to 27,448,000 persons. Major medical insurance is designed to help absorb the cost of serious illnesses, and pays benefits ranging up to $10,000, $15,000, or more for all areas of care prescribed by a physician.

DISTRIBUTION OF HOSPITAL EXPENSE PROTECTION

IN THE UNITED STATES, BY TYPE OF INSURER



Four Physicians Added To Greenville Hospital Staff

Four new doctors have been admitted to the staff of the Greenville General Hospital.

Dr. Verla McAnelly of Little Rock, Ark., and Dr. Hugh Bagby of Washington, D. C., will practice in anesthesiology.

Dr. E. G. Tutor of Memphis, and Dr. Paul Horn of Bainbridge, Md., will work in the field of pediatrics.

AUXILIARY

AMA Auxiliary Head Urges More Community Service

Physicians' wives must accept the community's challenge for knowledge and honest effort in helping to solve local problems. In taking office as the president of the Woman's Auxiliary to the American Medical Association, Mrs. Harlan English, Danville, Ill., called on members across the country to develop strong local public service programs built on community needs.

A number of community projects that local doctors' wives can take on voluntarily were cited by Mrs. English. They include: homemaker service programs, practical programs to help meet nutritional and recreational needs of older persons, civil defense educational programs, mental health activities, especially those dealing with alcoholism, programs for safety, poison control and water safety, and fund-raising for medical education.

Mrs. English succeeds Mrs. William Mackersie, Detroit, Mich. The new president-elect is Mrs. William G. Thuss, Birmingham, Ala.

Other Auxiliary officers installed at the 38th Annual Convention in New York include: Mrs. Paul E. Rauschenbach, Paterson, N. J., first vice-president; regional vice-presidents—Mrs. Harry F. Pohlmann, Middletown, N. Y., eastern; Mrs. C. Rodney Stoltz, Watertown, S. D., north central; Mrs. W. W. Hubbard, Nashville, Tenn., southern; Mrs. Stanley R. Truman, Oakland, Calif., western; Mrs. William H. Evans, Youngstown, Ohio, constitutional secretary; Mrs. C. R. Pearson, Baraboo, Wis., treasurer.

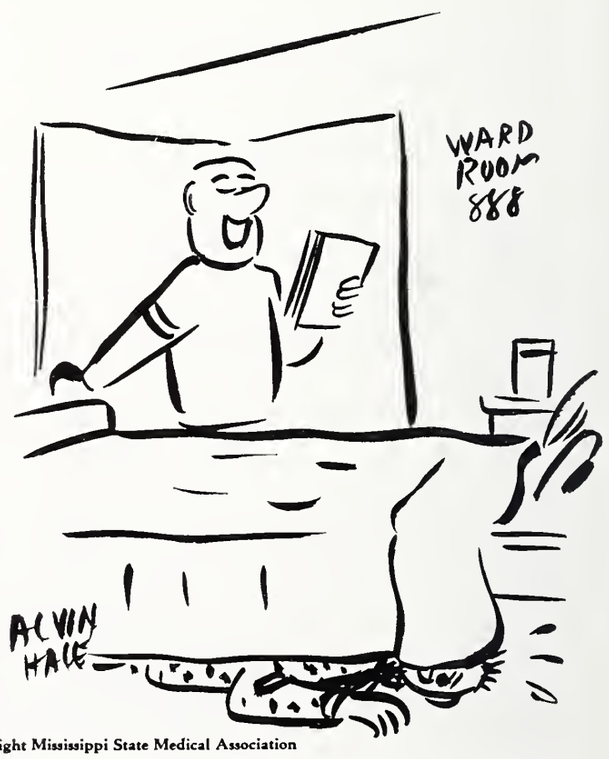
A check totaling $195,264.22 was presented to the American Medical Education Foundation by the Auxiliary at a luncheon honoring national past presidents. For the second time, the "Ethel Gastineau Trophy" was awarded to the Woman's Auxiliary to the Tennessee State Medical Association for outstanding service in behalf of the AMEF.

The convention delegates also voted gifts of $10,000 each to the American Medical Research Foundation and AMA's newly-organized scholarship and honors program and $1,000 to aid an AMA effort to put *Today's Health* magazine in high schools.

AMEF awards of merit were presented to the auxiliaries to the following state medical societies: Ohio, Texas, California, Indiana, New York, Nevada, Tennessee, Alaska, New Hampshire, and Alabama. The national Auxiliary also received a merit award.

Highlights of the convention:

- Dr. E. Vincent Askey, then AMA president, urged physicians' wives to help recruit qualified young people into medical careers.
- Mrs. Neil W. Woodward, Auxiliary civil defense chairman, discussed the importance of preparing for family survival in the event of disaster.
- Dr. George E. Gardner, Harvard psychiatrist, warned that teen-age anxiety over college admission is becoming a mental health problem in this country.



Copyright Mississippi State Medical Association

"What a lovely morn for your operation, Sir!"

JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION

September, 1961, Vol. II, No. 9

ORIGINAL PAPERS

The Management of Facial Injuries

Part I of III

RICHARD T. FARRIOR, M.D.

Tampa, Florida

THE MANAGEMENT OF FACIAL INJURIES must necessarily be of interest to all physicians with the increasing incidence of severe automobile and industrial injuries. The increasing incidence of lawsuits where judgment is passed for the plaintiff as a result of oftentimes avoidable scars or disfigurements demands some knowledge of this subject by every practitioner.

The purpose of this paper is to outline the practical management of facial injuries for the general physician, yet at the same time present a few specific techniques for the specialist experienced in the care of these injuries to add to his own armamentarium. Certainly, the entire field of facial injuries cannot be covered in any one presentation in great detail. However, it is the author's hope that this paper will serve as a guide and that some of the methods he has found useful may be of help to the reader in a given situation.

Although the interpretation has been broadened considerably in this country, the term "maxillofacial surgery" originated in the field of management of facial injuries. The centers and military units established for handling these cases during World War I were pioneered by a plastic surgeon with desirable otolaryngologic background, Sir Harold Gillies, and a dental surgeon, Sir William Kelsey Fry. The anatomic complexities of the region of the head and neck made it immediately

The anatomic complexities of the head and neck make facial injuries the concern of many medical specialists. Close cooperation among the neurosurgeon, the dental surgeon, the otolaryngologist, the plastic surgeon, and other practitioners is necessary to produce the best results.

The author points out that the increasing incidence of lawsuits where judgment is passed for the plaintiff as a result of oftentimes avoidable scars or disfigurements demands that every physician have some knowledge of this subject. In this paper, which will be published in three parts, the author outlines the practical management of facial injuries for the general practitioner and presents a few specific techniques for the specialist to add to his armamentarium.

Part I is presented in this issue. Part II will appear in the October Journal MSMA and Part III in the November issue.

Read before the Section on Eye, Ear, Nose and Throat, 93rd Annual Session, Mississippi State Medical Association, Biloxi, May 9-11, 1961.

apparent that this was the province of many specialties and that management would require close cooperation between all. The interest and abilities of each specialist are bound to overlap. Whoever undertakes the management of the severe injury, whether it be the neurosurgeon, dental surgeon, otolaryngologist, ophthalmologist, plastic surgeon, or orthopedic surgeon, must consider the problem from the point of view of each specialty, willingly calling for consultation. The general physician necessarily will be called on to manage these injuries from time to time, either as emergencies or completely. He must follow the medical philosophy of caring for these patients to the best of his ability. The better the general physician is informed regarding management, the more competent will be the important initial care, and he will be more likely to know when consultation is necessary and whom to call.

General management must receive top-priority and from the first attention must be directed towards the most serious aspect of the patient's condition, with teamwork established regarding the order of things. In each phase of the management, there must be a team captain willing to call on the special skills of the allied specialist who may be more informed regarding the particular anatomical and physiological intricacies in his area.

AUTOMOBILE INJURIES

The alarming number of automobile accidents, deaths, and injuries in the United States compels me to make a few remarks regarding this specific source of facial injuries. In general, it should be emphasized that there are over 100 deaths per day or five each hour in the United States from automobile accidents and approximately 50 times this many injuries. Approximately 100,000 of these yearly injuries result in permanent disabilities or deformities. The loss in the ability to be a wage-earner in itself produces terrific economic chaos.

Certainly the high incidence of automobile accidents in this country is influenced by the greater number of automobiles in use, the higher horse power, inadequate highways, and, all too often, more personality expression on the highway.

I am proud of the pioneer role my former chief in plastic and reconstructive surgery, Claire L. Straith, M.D., D.D.S., played in making physicians, the automobile industry, and the public aware of the problems of these injuries associated with automobile accidents. Over 35 years ago he went to the automobile manufacturers to emphasize the need for the padded dashboard and recessed instrument panel. It was Dr. Straith's ambition to make these items standard equipment, and I share his feelings wholeheartedly. The large advertising campaign carried on in about 1956 by the automobile industry regarding safety devices was, I believe, a tremendous step forward in public education. However, this has quieted recently and I am afraid that the American public continues to be willing to spend more for extra chromium but are unwilling to spend the relatively small charges for safety devices. Cooperation from automobile dealers should be sought in this campaign.

Dr. Straith emphasized the types of guest passenger injuries and stated in his consecutive series of automobile injuries that 70 per cent of these injuries occur in younger women. He found that for the passenger in the right front seat, most injuries are produced in three ways (Fig. 1). In



Figure 1. The typical windshield, dashboard and combined windshield and dashboard injuries are seen in this classic illustration of C. L. Straith, M.D., D.D.S., who pioneered in advocating safety devices for automobiles. (Straith, C. L.[27])

the first type of injury, the victim is thrown forward, often putting a hole through the windshield and then falling forward, face down, against the jagged glass at the lower portion of this hole, producing severe lacerations of the face and amputations of the nose and ears. The second type of injury results from a glancing blow on the windshield, producing cuts with the passenger falling forward on the dash to produce fractures. It has been my own experience that these are usually lesser facial fractures. In the third type, the passenger is thrown directly forward into the dash, receiving crushing facial injuries and severe multiple facial bone fractures.

Without digressing too far from the subject of management of the injuries resulting from accidents, I would like to emphasize the following for the prevention of these injuries:

1. Better driver education
2. Better standards of driver qualifications and licensing

3. Stricter laws and law-enforcement
4. Better safety engineering for the automobile
5. Public education in the use of safety devices
6. Better regulated highway and traffic flow
7. Better highway engineering for the prevention of accidents

GENERAL MANAGEMENT

At the receiving station, whether it be at the site of the accident, en route to the hospital, in the emergency room, or under controlled operating room conditions, the most important single factor is the general management of these cases. Time does not allow the details of care for each of the complications of severe head injuries, but the following outline should be kept in mind:

GENERAL MANAGEMENT

1. Airway
2. Hemorrhage
3. Shock
4. Intracranial damage
5. Skull fractures
6. Tetanus
7. Infection
 a. Wound infection
 b. Meningitis

Again, an order of priority must be established and attention directed to first things first. This is the responsibility of the first physician seeing the patient and must also be the responsibility accepted by the specialist, whether he be a maxillofacial surgeon, a neurosurgeon, or other specialist. Even severe shock must give way to priority of severe hemorrhage in the throat and obstruction of the airway, necessitating a tracheotomy. All physicians should be familiar with the emergency laryngotomy which can be utilized for immediate establishment of an airway through the cricothyroid membrane until a more orderly and lower tracheotomy can be performed.

It is a rare incidence when the specific treatment of a facial injury cannot be performed within the first few hours, even if there is intracranial damage. On the other hand, many of these injuries, particularly regarding the facial bones, can be delayed until the patient's general condition allows. Delay sometimes is necessary for as long as two or three weeks. After this period, fixation or fibrous union may be so marked that simple reduction of the fractures is markedly hindered and permanent malalignment may result. Generally speaking, however, it is the responsibility of the physician called upon to treat these injuries to act within the first few hours and to take the time necessary for accurate approximation and realignment of both soft tissue and bone injuries.

SPECIFIC TREATMENT

In the management of the specific injuries to follow, the fractures of the facial bones will be considered first, then we will deal with soft tissue injuries. This order is elected in that, whenever possible, I believe it is the order which should be followed when there are combined lacerations and fractures. Often the associated laceration will provide a route for direct examination and open reduction of the underlying fracture. The delicate meticulous handling of the soft tissue repair is less apt to disturb the reduced fracture than the manipulation of bone fragments is to destroy the accurate approximation of skin. Quite often this order cannot be followed as the soft tissue repair will already have been done, either by an outside physician or in the emergency room. If I, personally, am seeing an injury within the first few hours after the accident, I would prefer that a pressure dressing for hemostasis only be applied and the soft tissue repair left for delicate management. Too frequently, facial lacerations are sutured in a gross single layer which must be removed. Time and effort have been wasted, and the wound must be resutured accurately in layers.

In the sections to follow we will present some of the more common injuries of this area, with only brief comments about each, hoping that the suggestions will be found useful. The techniques outlined do not require elaborate equipment. The methods emphasized purposely utilize materials available in most hospitals and dental offices.

FACIAL BONE INJURIES

Careful clinical evaluation including accurate palpation supplemented by the x-ray findings is most important in analyzing any particular facial bone fracture. Palpation should be carried out simultaneously on either side of the face for comparison. The classic signs and symptoms for each type fracture cannot be dealt with in detail but again emphasis should be placed upon the fact that the clinical examination is more important in facial injuries than x-ray findings. X-rays often distort, exaggerate, or underestimate the obvious fracture which can be demonstrated by examination. Movement of the upper jaw with the remainder of the head and face held firm and the occlusion of the teeth must be noted. Although the ear canal may frequently become filled with blood from facial lacerations or nose bleeds, one

must critically evaluate whether there is active bleeding from the ear with the possibility of a temporal bone fracture kept in mind. Basal skull x-rays should be made on all patients with severe



Figure 2. Nasal Bone Fractures. Left: Eight hours following blow to nose. Compound, comminuted fracture with bleeding. Right: Postreduction. Complete anesthesia, as for rhinoplasty surgery, is advocated to allow more delicate manipulation of the fragments and accurate packing and splinting of the nose.

injury and particularly those with postnasal bleeding or ear symptoms. The open-mouth Waters view is the most useful single film for analysis of the facial bone. If any question exists regarding the severity of the head injury, the full series of skull x-rays are mandatory.

Postoperative antibiotic therapy should be administered almost without exception to prevent complications or the loss of osseous tissue from infection.

Again, inspection and palpation are the chief aids in determining the existence and the severity of nasal bone and septal fractures and dislocations. X-rays should be obtained in all cases, nevertheless, both for confirmation and for medicolegal purposes.

These fractures may be, and in fact most often are, comminuted (Fig. 2). They may be simple or compounded with breaking either of the skin or the nasal mucous membrane. If the surface tear is severe enough, often the reduction can be done more accurately with open methods and direct vision, possibly extending the exposure with limited rhinoplasty incisions and soft tissue elevations. Generally the latter is not performed and the reduction can be accomplished with blunt instruments and bimanual palpation. This is particularly true if the injury is seen early without excessive edema. As with many facial injuries when swelling is severe, it is sometimes advisable to wait approximately five days for the swelling to subside allowing more accurate palpation.

The complete anesthesia as utilized in rhinoplastic surgery, including topical cocaine-adrenalin and xylocaine-adrenalin infiltration, is administered. I do not feel that this point can be overemphasized in that so often, despite the dramatic delight the physician may have at stating that he simply inserted an instrument and "popped" the bones right back into position with one move, he is unable to return for additional manipulations and more accurate alignment due to the patient's pain and fright. With complete anesthesia, delicate alignment can be accomplished and molding carried out without fear of producing an unhappy patient.



Figure 3. Healed Nasal Fracture. This case illustrates the residual deformity from an unreduced nasal fracture, showing considerable depression of the entire lateral nasal vault and a marked septal deflection and dislocation. The dorsal hump is not severe. The septum was perpendicular to the median plane and produced almost complete obstruction bilaterally. Combined rhinoplasty with nasal osteotomies and septal reconstruction is advocated for the correction of these deformities.

With this anesthesia, reduction of septal dislocations and fractures can be carried out or at least approximated in the midline with the help of the dressing and internasal packing. Generally, severe septal injuries are disappointing in the results obtained and secondary septal surgery may be required.

In the case of early hematomas of the septum, an adequate incision is made for evacuation of the hematoma and open reduction of the septal fractures and dislocations can be carried out through this incision. Emphasis is placed on the



Figure 4. Traumatic Deviated Nasal Dorsum. The profile in this patient is not remarkable. However, on the anterior view, marked depression of the lateral nasal vault and twisting of the nasal dorsum are evident. The airway cannot be improved without combined internal and external surgery and neither the external framework nor the septum can be maintained in the midline, if done independently without combined osteotomy and septal reconstruction.

removal of a minimal amount of cartilage unless repositioning is impossible and some over-riding persists. The over-ride may be removed, eliminating postoperative lamination and complicating any secondary septal surgery. If the hematoma is not evacuated within a matter of a few days, the cartilage often is absorbed or becomes of such poor quality that it cannot be of any value for support and the characteristic external deformity will occur with loss of support in the cartilaginous dorsum of the nose and columella retraction.

I have found the Sayre periosteal elevator useful in that it is rounded and blunt at the end, yet allows a firm grip for the elevation of fractures. Standard smaller nasal periosteal elevators are sometimes useful for smaller displacements and more delicate positioning. The Asch forceps rarely are utilized to avoid crushing of the soft tissues.

When nasal bone fractures are associated with transverse fractures of the middle third of the face, reduction may be more complicated and may necessarily be combined with interosseous wiring or traction with an external appliance. Cerebrospinal fluid leak and the threat of meningitis must be kept in mind.

We have found DuPont's cellulose cord sponge most useful in packing the nose. This sponge can be used continuously, but is preferably used singly or folded in loops and tied with black silk. This is the same material utilized for the cord "rag mop." The synthetic nature of the sponge produces minimal tissue reaction. In particular, we have been impressed with the ease of removal along the axis of the pack and the minimal bleeding which occurs when the packing is removed. These packs remain in the nose in any significant fracture for from two to three days. An external nasal splint, whether malleable metal, dental compound, or plaster of paris, is left in place for a full week.

With this management, I believe that one would be above criticism. More important, he is less

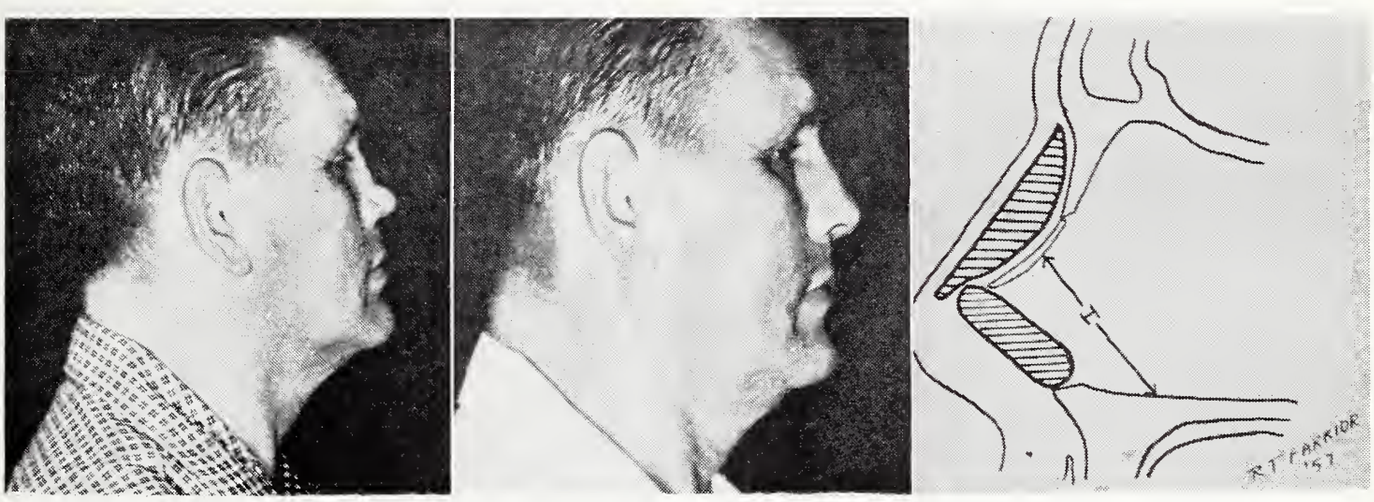


Figure 5. Crushing Nasal Deformity. Severe saddle deformity of the nose with loss of dorsal and columella support. An attempt should be made to increase the internal height of the nose with septal implants rather than simply camouflaging the external deformity with dorsal and columella implants. Mucous membrane flaps and modified Z-plasty procedures may be necessary to improve the airway.

apt to end up with a disappointing result. The patient knows that all possible has been done.

The details of secondary repair of nasal injuries cannot be dealt with here. However certainly one must emphasize the need for the combined nasal osteotomy and some form of septal reconstruction for the secondary deformities (Fig. 3). Quite often with the concave nasal vault or twisted nasal dorsum produced by injuries, it would be impossible to obtain an airway by simply straightening the nasal septum and not doing the combined external nasoplastic procedure (Fig. 4). The same also holds true for attempts at straightening the external nose without doing combined nasal septal surgery. We now rarely do the simple Killian submucous resection, but more often use some type of septal reconstruction in which the autogenous cartilage is repositioned or on occasion removed and replaced in the midline with the aid of incisions and pedicles. A delicate balance must be maintained between straightening the nose, the amount of septal support removed, and maintaining adequate external and columella support. In the saddle nose, emphasis is placed on improving the airway with septal support and mucous membrane flaps or Z-plasties rather than camouflaging the deformity by dorsal and columella implants. An attempt is made to increase the height of the nose opposite the limen vestibuli (Fig. 5).

FRONTAL SINUS FRACTURES

When fractures of the external plate of the frontal sinus occur, one must critically evaluate possible frontal bone fracture which would require neurosurgical consultation. When only the outer plate is involved, our treatment has been quite conservative. A limited incision is made beneath the eyebrow, the involved sinus entered through its floor, and the plate lifted forward and molded forward with a blunt elevator. The wound is closed accurately but with interrupted sutures and no drain is inserted into the sinus. It is often necessary to remove a 1 cm. portion of the floor of the sinus along the roof of the orbit to gain access and allow introduction of the elevator. The area of the nasofrontal duct is given wide berth and extra caution taken not to disturb this area. Packing or attaching external traction most often is not necessary. Packing the frontal sinus, I believe, produces more trouble than good, and perhaps would necessitate opening the nasofrontal duct area when this ordinarily can be avoided. Crushing injuries of the supraorbital ridge may require open reduction and direct interosseous wiring. If the fracture extends into the opposite sinus, more often the elevation can be carried out through the single incision and the elevator carried to the opposite side through the midline septum. However, a bilateral incision may be necessary.

ZYGOMATIC FRACTURE-DISLOCATIONS

The fairly sturdy zygomatic complex or malar bone most often is dislocated from its relatively fragile attachments rather than fractured itself. Comminution, of course, is not uncommon with crushing injuries or in association with other facial fractures. The fracture-dislocation with en masse displacement of the zygomatic compound may be reduced through any one of several approaches (Fig. 6). In the majority of my cases

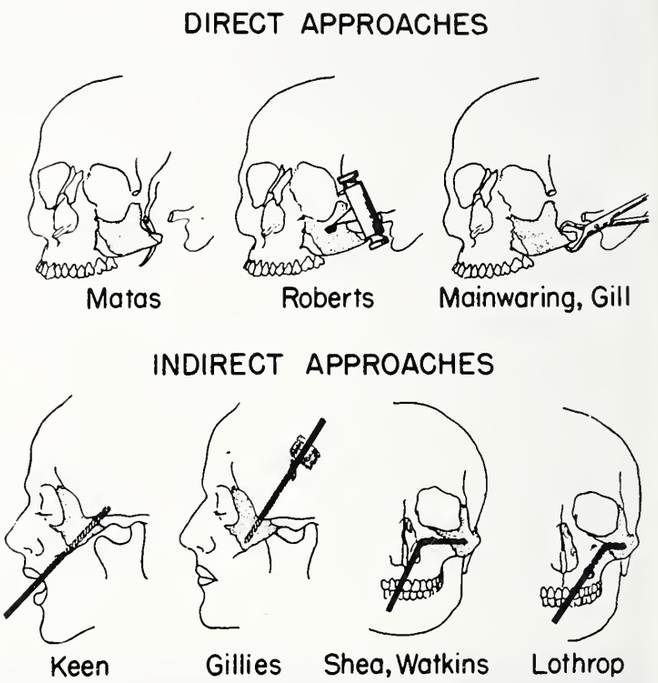


Figure 6. Reduction of Zygomatic Fracture-Dislocations. Each fracture must be individualized and the appropriate approach utilized. The author favors the Gillies approach supplemented when necessary by the Gill forcep technique. Entrance into the antrum is discouraged except when essential for crushing injuries which require packing. (Huffman, W. C. and Lierle, D. M.[12])

I have found that this fracture can be reduced through the Gillies approach with or without the bimanual assistance of a towel or Gill forcep grasping the bone externally. In the Gillies approach, a temporal incision is made within the hairline and dissection carried out cleanly under the temporalis fascia to beneath the zygoma. This approach is particularly good for fractures of the

zygomatic arch but the elevator may be carried forward to beneath the main portion of the zygoma with good leverage. In the majority of cases, the bone can be repositioned well and will maintain its position without any direct wiring or external appliance (Figs. 7 & 8). The Gillies



Figure 7. Zygomatic Fracture-Dislocation. Left: These fractures characteristically demonstrate depression of the malar eminence with an infra-orbital drop-off, subconjunctival hemorrhage, and hypesthesia in the distribution of the infra-orbital nerve. Right: Postreduction using the Gillies approach alone, without direct wiring or packing.

approach is not contaminated as in the intraoral approaches and provides a nice anatomic dissection.

If the entire zygomatic compound can be readily moved but does not want to maintain the good position, particularly in the infra-orbital area, a limited incision is made over the infra-orbital rim directly over the fracture line and the fracture wired with a simple figure of eight No. 28 wire interosseously. Occasionally, it is necessary to repeat this interosseous wiring at the zygomaticofrontal articulation. I have rarely found it necessary to utilize the intraoral approaches or the Lothrop (Caldwell-Luc) approach. This approach, of course, must sometimes be utilized when there is marked comminution or loss of support in the floor of the orbit requiring reduction through the antrum and packing.

Allied to this type of injury is the "blow-out" injury which usually results from small objects, at least the size of a baseball, hitting directly over the globe. With this there may be herniation of the infra-orbital fat and muscle into the sinus. Packing of the sinus in these cases may be necessary, and if not carried out, open examination with careful elevation of the periorbita and return of the contents to the orbit must be done with some support or hammock maintained across the floor. This may be done with either autogenous or homogenous preserved cartilage. I have done this nicely in the past using autogenous septal cartilage placed subperiostially in the floor of the orbit. With either the "blow-out" fractures or comminuted zygomatic bone fractures, I have had little confidence in any of the techniques utilizing inflated balloons in the antrum. For packing, we have again used the cellulose cord sponge or expanding synthetic sponge of one type or another for continuous pressure.

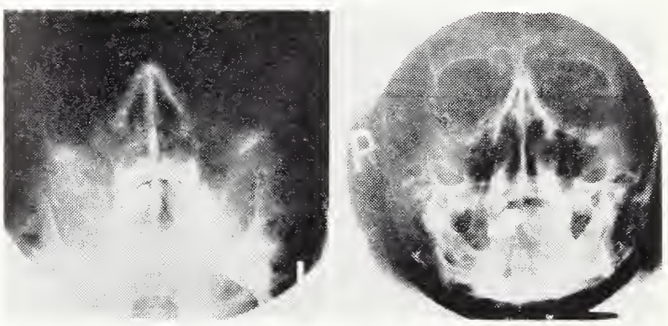


Figure 8. Zygomatic Fracture-Dislocation. Left: Typical x-ray with antral clouding, infra-orbital drop-off, increased diagonal diameter of the orbit, and fracture of the inferior lateral wall of the antrum. Right: Two weeks postreduction with a Gillies approach combined with towel forceps for bimanual manipulation. The malar eminence was satisfactorily corrected as was the infra-orbital rim. The inferior lateral fracture irregularity did not seem to warrant further manipulation. There was no postoperative diplopia or persistent hypesthesia.

(Fractures of the mandible, maxilla, and the middle face, and the preparation, anesthesia, and repair of soft tissue injuries will be discussed in Part II to be published in the October 1961, issue of JOURNAL MSMA.) ★★★

Bayshore Boulevard at Hyde Park Avenue

GEOPOLITICS, CIRCA '61

Teacher in Washington school: "Where is the New Frontier?"
Son of Republican Senator: "Out where the waste begins."

Fluorides and the Physician

AARON TRUBMAN, D.D.S., M.P.H.
Jackson, Mississippi

ALTHOUGH THE DENTIST has the prime professional responsibility in the field of dental health, the interrelationship of dental and general health demands that the physician take an active role also. In this article, the role of the physician in the public use of fluorides as a dental caries preventive measure will be discussed.

The physician concerned with the total health of his patients should also be concerned with their dental health if he is to discharge his responsibilities in treating and preventing diseases affecting man. Dental caries, the most prevalent disease in highly developed societies, requires the attention of all interested in the health of our citizens.

What can the physician do to attack the enormous problem of dental caries? The responsibility and skills necessary to treat the existant condition rests with his fellow health practitioners, the dentists, but the responsibility of prevention should be a direct concern of the physician as well as the dentist. Fluorides, both topical and extradietary, have proven to be safe, effective, and economical in the reduction of the incidence of dental caries. The role of the physician is to prescribe and encourage the utilization of these methods, but in order to do so intelligently, the physician must have adequate background knowledge.

TOPICAL FLUORIDE APPLICATIONS

The two widely accepted methods of topical applications utilize a 2 per cent NaF or an 8 per cent SnF solution applied directly to the crown surfaces of the teeth. The method of application technique for either of these solutions varies little.

The time of application does vary greatly. In the NaF method, four applications per series is performed, with the series optimally recommended for children at ages 3, 7, 10, and 13 years. Application series at these ages is recommended to effectively treat the deciduous and permanent dentitions by taking into account the eruption pattern of these teeth. Of course, the interval between the series may vary according to the slight differences in eruption pattern of some children. This is a decision for the dentist to make.

The SnF method is applied in one visit, usually every six months or once a year during childhood. The time interval between applications will vary according to the caries activity of the individual child.

Because dental caries is the most prevalent disease of civilized man, especially children, the physician should be concerned with the most effective control measure to combat this disease—topical and extradietary fluorides. The author, Supervisor of Public Health Dentistry, Mississippi State Board of Health, discusses the physician's role in prescribing and encouraging the utilization of fluorides. He presents the factors involved in topical and extra-dietary fluorides and concludes that, where feasible, fluoridation is the most effective method of controlling dental caries by fluorides.

Both of these methods have been found to be effective. The choice of method rests with the dentist. The effectiveness of topical fluorides in reducing dental caries is considered to be due to the incorporation of the F ion in the apatite structure of the surface enamel, forming CaF. The surface enamel is thus rendered more resistant to the decalcifying action of oral acids, which play a major role in the dental caries process.

Topical fluoride applications should be encouraged for all children not consuming an adequate (1 mg. F) amount of daily supplementary fluorides either from fluoridated public water sup-

plies or dietary supplements. In large group studies, reductions in dental caries in children of 40 per cent to 50 per cent have been demonstrated. This means, of course, that not every child receiving topical fluoride applications will experience the average reduction. Some will exhibit a greater reduction than others, a phenomenon to be expected and explained to parents.

INDIVIDUAL DIETARY F SUPPLEMENTS

In order to effectively and safely prescribe dietary F supplements, the age of the child and the F content of his water source must be considered. Prescribing these preparations, either in tablet or liquid form, will be beneficial only during the formative stages of tooth development, which are the first 8 or 9 years of life.

The amount prescribed will be dependent upon the F content of the patient's water source. A water supply containing more than 0.70 ppm. F should be a contraindication for the prescribing of dietary F supplements. There are two reasons for this. First, water containing more than 0.7 ppm. F comes near approaching or exceeding the optimum concentration, and prescribing fluorides for patients drinking such water would not be of any significant aid in reducing dental caries. Second, if the total supplemental dietary F intake is more than 1.5 mg., for a prolonged period of time, there is a possibility of producing objectionable dental fluorosis.

The objective in prescribing dietary F supplements is to provide 0.5 mg. of F ion daily for children up to 2-3 years, and approximately 1.0 mg. daily beyond 3 years of age, where the drinking water is essentially free of fluorides. For each 0.1 ppm. F in the drinking water, adjust the prescription downward 10 per cent of the daily prescribed amount where no fluorides are present in the drinking water. Information concerning the F content of public water supplies is available from the local health department or the State Board of Health. The F content of private water sources will have to be determined individually. Consult the State Board of Health concerning this service.

In prescribing extra-dietary fluorides, the Council on Dental Therapeutics of the American Dental Association recommends that no more than 264 mg. (120 mg. fluorine) should be dispensed at one time.[1] The National Research Council estimates that 250 mg. or more of fluoride will produce acute toxicity in children.[2] As a safety measure, parents should be cautioned to store the fluoride preparation out of the reach of children.

In the extra-dietary fluoride phase of dental caries prevention, the physician, and especially the pediatrician, can and should play an important role. Most children do not see a dentist until 3 years of age or older, thereby reducing considerably the opportunity of receiving the benefit of this preventive measure. For maximum beneficial results, the extra-dietary fluoride administration should commence as early as possible in life—at birth if possible. The parents expect and should receive health supervision of their children by the physician who takes into account the total health of the child.

Topical fluoride applications and individual dietary fluoride supplements are individual methods of fluoride administration for the control of dental caries. Both are much more expensive than public water fluoridation, and neither has proved as effective as this public health method of dental caries prevention.

PUBLIC WATER FLUORIDATION

The most effective, safe, and economical means of fluoride administration is by consumption of drinking water containing sufficient fluorides. For a maximum cost of 10 cents per year per capita, any Mississippi town can fluoridate its water supply. The initial nonrecurring cost of equipment is very small. The operation of fluoride feeding equipment requires less skill and time of the water works personnel than chlorination. The margin of safety built into the feeders and the amount of fluoride chemicals kept on hand preclude any possibility of accidentally causing toxic conditions.

The list of recognized health organizations approving and recommending fluoridation of fluoride-deficient public water supplies is too lengthy to enumerate. All major health organizations, state and national, have gone on record favoring this public health measure. These include the American Medical Association and the Mississippi State Medical Association.

The physician's role in achieving water fluoridation in his town is to actively support fluoridation efforts. Talking to his patients about fluoridation and emphasizing his approval will aid in dispelling the unfounded fears and doubts of some laymen.

The physician who does not support a fluoridation program or just gives weak, passive support will be assumed to be opposed to it. What is the layman to think if the physician to whom he looks for advice and information concerning health matters is unenthusiastic or noncommittal? This no doubt is due in many instances because the physician is really not sufficiently knowledgeable

about fluoridation. Reliable, scientific information concerning fluoridation is readily available from the State Board of Health, the American Medical Association, and the American Dental Association.

Because water fluoridation is the most effective, the least expensive, and requires no conscientious effort by the parent and child, it is the better of the two methods of administering dietary fluoride supplements. Studies have demonstrated that there is about 60-65 per cent less dental caries in individuals who have consumed water with adequate fluoride content during the first 8 or 9 years of life than in those individuals not having the benefit of fluoridated water. The incidence of malocclusion has also been found to be less in areas with adequately fluoridated water. This phenomenon is presumably due to the retention of deciduous teeth until normal exfoliation and prolongation of the life of the first permanent molars, which permits a more orderly pattern of eruption and alignment of the permanent dentition.

Protection against dental caries by ingesting extra-dietary fluorides is considered by authorities to be due to the incorporation of the fluoride ion into the total structure of the enamel, thus rendering it less soluble to the acids of the carious process.

SUMMARY

Since dental structures are an integral part of the whole person, the prevention and control of the most widespread disease of civilized man, dental caries, should be a concern of the physician.

Fluorides have been proven an effective control measure in reducing the incidence of this disease. The physician can play an important role in the utilization of fluorides by:

—Advocating that children receive topical fluoride applications, especially in areas where water fluoridation is not available or feasible.

—Prescribing fluoride preparations for children, starting from birth and administered until 8 or 9 years of age in areas where the drinking water is deficient.

—Advocating that fluoridation be initiated in public water supplies which are fluoride-deficient. Where feasible, fluoridation is the most effective method of controlling dental caries by fluorides. ★★★

2423 North State Street

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MISCHANNELED

A woman was complaining to the psychiatrist that her husband had terrible delusions.

"He thinks he's a television set," she wailed. "All day long, he just sits in the corner of the living room making faces."

"That doesn't sound too serious," said the doctor. "Just bring him in tomorrow and we'll start him on his way to being perfectly normal."

"No, no, doctor, don't cure him," she cried. "We want the entertainment. Just adjust his horizontal linearity."

—Wayne and Shuster in *Parade Magazine*

Athletic Injuries

WILLIAM C. WARNER, M.D.
Jackson, Mississippi

Fall brings school for the youngsters, football for its fans, and many, many athletic injuries for the physicians. As the author points out, accidents happen in all sports, but football causes the greatest number because of the body contact and the many participants. Discussion in this paper is limited to the joint injuries of the extremities. Diagnosis and management are considered. Early care in all cases is recommended.

DURING THE FOOTBALL SEASON physicians encounter many athletic injuries. Of course, accidents happen in other sports, but because of the body contact and the many participants, the number of injuries rises in the football season. As physicians, we can minimize the effects of these injuries by early and adequate treatment.

The most difficult group of injuries to treat are the joint injuries. This paper presents only the joint injuries of the extremities.

DISLOCATED SHOULDER

The shoulder is usually dislocated anteriorly. It may strip the glenoid labrum from the glenoid, cause capsular tears, and fracture the tuberosities of the humerus or the head of the humerus. Reduction is usually easy. With adequate sedation or anesthesia for relaxation, the reduction can be accomplished by traction or with the Koker maneuver. The next step, immobilization, is the most important part of the treatment. The shoulder must be immobilized for at least three weeks. This can be done adequately with a Velpeau dressing. Adequate immobilization following the first dislocation will prevent many recurrences.

The recurrent dislocation is a different situation from that of the fresh, initial dislocation. The treatment of choice is surgery. There are a number of operations devised for a recurrent dislocating shoulder. Basically, it is a capsular or tendinous repair.

ACROMIOCLAVICULAR SEPARATIONS

Acromioclavicular separations usually result from a direct fall on the shoulder. A capsular tear with partial separation of the joint to a complete tear of the capsule, the acromioclavicular ligament, and the coracoclavicular ligament may result. A partial separation is frequently demonstrated by x-ray with the patient standing and holding a weight in the hand. The partial separation is satisfactorily treated by strappings. Even a slight prominence of the distal end of the clavicle that may persist does not materially impair the function of the shoulder. The difficult acromioclavicular separation, however, is the complete separation. In this instance there is not only a tear of the capsule but a complete rupture of the acromioclavicular ligament and the coracoclavicular ligament. Conservative treatment with strapping results in many failures. Why? The joint is not reduced. In these injuries we can replace the distal end of the clavicle, but in so doing we push the capsule into the joint and the dislocation is not reduced. An early open reduction with repair of the capsule and ligaments is advisable in these cases.

DISLOCATED ELBOW

A dislocated elbow is a common injury. The elbow is usually dislocated posteriorly with the olecranon and head of the radius displaced posteriorly. Reduction as a rule is not a problem. It can be accomplished simply by traction with the elbow slightly flexed. However, an occasional difficult reduction occurs. In a teenager, an avulsion of

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the medial epicondyle may take place, and the fragment with its flexor muscle attachment may be caught between the humerus and the olecranon. An x-ray of the other elbow will help in making this diagnosis. In these instances a closed reduction will not be adequate. An open reduction is necessary to reduce the dislocation and also to reattach the epicondyle with its flexor muscle attachments.

DISLOCATIONS AT THE WRIST

Injuries at the wrist are usually fractures, but a few cases may have an injury with considerable tenderness and swelling and yet no demonstrable fractures. Scrutinize these films closely for a possible carpal bone dislocation. A very common dislocation in this region is the dislocated semilunar bone. In these injuries the semilunar bone is displaced anteriorly by the capitate squeezing it against the end of the radius. A tip-off of this injury is the median nerve symptom. As the bone goes anteriorly, the median nerve is subjected to pressure, and pain and numbness in the median nerve distribution is a classical sign. Some of these dislocations can be reduced by traction and manipulation. Others require an open reduction or possibly an excision of the bone. In any event, they must be treated early because of the nerve injury.

DISLOCATIONS OF THE FINGERS

These injuries are quite common. A buttonhole tear in the capsule results with the head of the bone protruding through the tear. Traction may not reduce this dislocation. Manipulation, using the distal fragment to push the capsule from the head of the bone, gives better results.

DISLOCATIONS OF THE HIP

Hip dislocations rarely happen in football, but should be treated as soon as possible. In a young teenager a slipped capital femoral epiphysis may develop and appear as a fracture or dislocation.

KNEE INJURIES

Knee injuries are very common. A few years ago physicians saw innumerable ankle sprains, but since the ankles are now wrapped or strapped, the knee comes in for the most punishment. Most knee injuries involve either the collateral ligament and cruciate ligament or the semilunar cartilages. Partial tears of the ligaments may do well with conservative treatment with strapping and elimination of contact work for several weeks. A complete tear of one or more of the ligaments should be treated early with surgery. If the knee is catching or locking and there is incomplete motion, the chances are there is a tear in a semilunar cartilage. Where there is a mechanical block in the knee, the treatment is surgical. Any torn cartilage should be removed. Several injuries may happen at the same time. The most frequently seen combination is the torn medial collateral ligament, anterior cruciate ligament, and medial semilunar cartilage. The end result depends somewhat on early surgical repair of the ligament and excision of the torn cartilage. Late repairs, though of some benefit, will not give as good a functioning knee.

ANKLE INJURIES

These are usually minor and the most frequent injury is a slight tear in the talofibular ligament. These respond well to adequate strapping and protection of the ankle. The severe sprain involving a tear of the talofibular and the calcaneofibular ligament, should be treated as a dislocation. X-rays should be made with the foot inverted. If the ankle is unstable with the talus tending to be displaced, either cast immobilization or a surgical repair of the ligaments is recommended.

In conclusion, early treatment of these injuries is recommended. The end results depend somewhat on early treatment. ★★★

727 Carlisle Street

CROSSING THE BAR

The curfew tolls the knell of parting day,
A line of cars winds slowly o'er the lea;
A pedestrian plods his absent-minded way,
And leaves the world quite unexpectedly.

—*Savings and Investment*

Clinicopathological Conference XX

Conducted by the Department of Pathology
University of Mississippi School of Medicine
Jackson, Mississippi

September's CPC involves a 65-year-old colored female who was first seen with a chief complaint of cramping, nonradiating upper abdominal pain of seven days' duration which occurred mainly in the right upper quadrant. She had had no fever, chills, diarrhea, constipation, hematemesis, melena, or jaundice. Laboratory evaluation showed an amylase of 740 and a glucose of 768 mg. per cent.

Discussers are Drs. Curtis P. Artz Jr., Fred Allison Jr., Robert D. Sloan, Roger B. Arhelger, and Joel Brunson.

Dr. Curtis P. Artz Jr.: "This 65-year-old colored married female housewife was first seen in the University Medical Center emergency room on May 1, 1960, with a chief complaint of cramping, nonradiating upper abdominal pain, mainly in the right upper quadrant, of seven days' duration. Following ingestion of fatty food, she had nausea, vomiting, RUQ pain, and tenderness of moderate severity. One day prior to admission (30 minutes following a fatty meal) she developed severe nausea, vomiting, and RUQ pain of a colicky nature. She denied fever, chills, diarrhea, constipation, hematemesis, melena, or jaundice.

"For several years, she had noted bloating after ingestion of fat. One year prior to admission, she was hospitalized in Mendenhall for complaints similar to present admission. Her only other complaint was mild hypertension for one year. It would appear that somebody had read the textbook and had tried to copy what seemed to be the signs and symptoms of gallbladder disease. On the other hand, one must remember that patients with pain in the RUQ or midepigastrium are good candidates for pancreatitis. It might have been obstruction, a perforated ulcer or an ulcer that was penetrating into the pancreas, but with this history one would think first of something in the biliary tree, most likely an attack of acute cholecystitis.

"Physical examination revealed an obese 65-year-old colored female in acute abdominal pain with a diffuse distribution. Temperature was 99°, blood pressure 150/110. The eyegrounds showed a grade I hypertensive retinopathy. The lungs were clear and there was a grade I aortic systolic murmur without cardiomegaly. The abdomen was obese with diffuse direct tenderness, more severe in the epigastrium, where there was also rebound tenderness. There was muscle guarding throughout the abdomen, but no masses or organs were palpable. Bowel sounds were hypoactive. Rectal examination was negative.

"Sometimes in perforated ulcer one will get an irritation in the cul-de-sac from gastric juice that escapes and gravitates; this gives tenderness on rectal examination. It appears that this patient either had an attack of acute cholecystitis with a diffuse distribution of pain or had gallbladder disease with a later development of pancreatitis.

"Laboratory evaluation revealed hematocrit of 44 (probably a little hemoconcentrated), WBC 12,000, CO_2 29, Cl 106, amylase of 740, potassium 3.9 and sodium 130. NPN was elevated some at 37 mg. per cent and glucose 768, a prothrombin of 21, and elevated bilirubin 3.4 with 1.2 direct, and alkaline phosphatase elevated to 8.8, a thymol turbidity of 1.8.

"First she has an amylase of 740; next she has a glucose of 768 mg. per cent. Maybe Dr. Allison could help. If a nondiabetic patient is receiving a glucose solution intravenously, how high would you expect the blood glucose to be?"

Dr. Fred Allison Jr.: "I cannot answer that precisely. I would not expect it to be this high."

Dr. Artz: "From my best available sources it should be in the neighborhood of 250 or 300 mg. per cent. How many people do you see with this 768 blood glucose that are not in diabetic coma?"

Dr. Allison: "You can see it in diabetics who have had some acute insult or acute infection."

AMYLASE INTERPRETATION

Dr. Artz: "Apparently this woman was not in coma, and she certainly had a tremendously high blood glucose. Her amylase of 740 is significant but it is difficult to state that it means pancreatitis. It used to be felt that blood amylase above about 500 s. units was pathognomonic of pancreatitis. I think as we follow blood amylase levels more and more we probably are prone to get away from this and be very careful of how we interpret blood amylase.

"Dr. Harvey Bernard of Washington University, St. Louis, has reported that in his experience they have had more cases with blood amylase above 500 that had no acute pancreatitis but only cholelithiasis than those who had pancreatitis. In a UMC recent patient with acute abdominal pain and gangrenous bowel, the amylase in the peritoneal fluid and the serum amylase were 1400. There was not any of the three of us who felt that this was anything except pancreatitis. We were sure that an amylase that hot must be pancreatitis, although it appeared that a segment of bowel was gangrenous and that a large quantity of amylase leaked into the peritoneal fluid and was absorbed into the blood stream.

"We see an elevated serum amylase in perforated duodenal ulcer, mesenteric thrombosis, and intestinal obstruction as well as in pancreatitis, but in this case with a high glucose one should think most strongly of pancreatitis. Probably the real strong point is the fact that the glucose is quite high. On the other hand, if this were a destructive process in the islet cells that was so great that it would give a nondiabetic patient such a high blood sugar, one would expect it to be a very fulminating pancreatitis accompanied by shock. From the history, it is an edematous necrotizing pancreatitis and not the fulminating hemorrhagic type.

"The bilirubin was 3.4, indicating a possible obstruction in the common duct. Certainly, this would not be out of order with either pancreatitis or an attack of acute cholecystitis. The alkaline phosphatase was elevated, additional evidence of a stone or block in the common duct. Twenty-four hours after admission, the amylase had gone down to 94 and the WBC had dropped, the stools were brown, and the urinalysis was normal except for glycosuria. The abdominal and chest films were normal. May we look at the films."

Dr. Robert D. Sloan: "A routine chest film at the time the patient was seen in the emergency room was within normal limits for the patient's age. The heart was not enlarged, and there was only moderate tortuosity of the aorta. The lungs were clear, and the diaphragm was at a normal level. There was no free air beneath the diaphragm."

Dr. Artz: "Could we have the abdomen film?"

Dr. Sloan: "A recumbent film of the abdomen was obtained when the patient was in the emergency room, and recumbent and erect abdominal films were obtained on the second and third hospital days. All of these films were essentially similar in appearance. There is no abnormal gaseous distention of the intestinal tract; in fact, there is less gas than one frequently sees in the intestine. Where visualized the intra-abdominal and retroperitoneal soft tissue structures appear normal, and no opaque calculi or calcifications are identified.

"In essence, then, we have not shown anything on these routine films to explain the patient's clinical picture. Acute pancreatitis, of course, is not an x-ray diagnosis. The most common x-ray change produced in that entity is a paralytic ileus pattern, and this is not present here. The presence of fluid in the peritoneal cavity may also be detected on occasions, but again there is nothing on the current films to suggest this."

HOSPITAL COURSE

Dr. Artz: "Apparently, those who treated this patient thought that she had acute pancreatitis. She was treated with nasogastric suction, intravenous fluids, insulin, and antibiotics. They did do a paracentesis and this was negative. This single negative paracentesis is not very significant.

"On the third day she was allowed a liquid diet. I do not know the type of intravenous fluids. I hope, if they felt that she had pancreatitis, that they were trying to replace her plasma volume because such patients have a marked diminution in plasma volume. Serum albumin is a preferable replacement solution. She should have received calcium. I am amazed that a calcium determination was not done. Sometimes it falls as low as 7 and 9 mg. per cent. From the protocol, she did well from the third to the 10th day.

"I am a little amazed that certain other labora-

tory tests were not performed. Somebody must have been very sure of his diagnosis. I would have wanted to follow the glucose; 768 mg. per cent is disturbing. When there is doubt between pancreatitis and an attack of acute cholecystitis, the serum lactase may be of value. This takes about 24 hours, but it is at least worth doing when you are not sure what the amylase means. After all, the serum amylase being up at 740 and dropping down to 94 is rather typical of acute pancreatitis.

"Several years ago one of my assistant residents, Dr. Luther Keith at Ohio State, did peritoneal taps on many patients. He found that in patients who had pancreatitis, the amylase content of the peritoneal fluid might stay up for 72 to 96 hours, but the amylase content in the blood would drop down in a period of 24 hours.

TERMINATING EVENTS

"Apparently the patient did all right. On the 10th day she became somnolent with impending coma. Her urine sugar was 4+ for glucose and a trace of acetone. She apparently was showing some evidence of diabetic coma. She received intravenous fluids and parenteral insulin.

"The lab reported chlorides of 106, CO_2 19, which is a little on the acidotic side, potassium of 4.9, and sodium of 141, an NPN that had risen, and glucose that was still up at 451 with a negative plasma acetone. I would imagine that this is probably the tipoff that this individual most likely had pancreatitis with destruction or lack of function of a certain number of insulin producing cells in her pancreas.

"A differential diagnosis at this stage would be between a woman who was a diabetic (and still we have nothing in the history that shows that she was a diabetic) and acute destructive pancreatitis. I imagine that the protocol is more in keeping with pancreatitis than it is with a diabetic with acute cholecystitis. After adequate diabetic treatment she was still obtunded and had a Babinski on the left. Her blood pressure was 154/74, pulse 132, right upper quadrant paracentesis was negative.

"An EKG was normal. I am amazed that an EKG was not taken before this because one usually feels that the differential diagnosis of abdominal pain includes coronary occlusion. Blood cultures were drawn and cultures were taken of infected saphenous cutdown sites. I am ashamed that the fellow who wrote the protocol did not say anything about the blood culture. Do you know anything about the blood cultures that were drawn at that time?"

Dr. Roger B. Arhelger: "They were not in the chart at the time of autopsy."

Dr. Artz: "It is quite possible at this stage of pancreatitis that this patient who had been hyperglycemic could have peritonitis. Her temperature was elevated and it is quite possible that she had peritonitis with septicemia. A PA of the chest revealed infiltrative changes in the upper lung fields. She spiked a temperature up to 103° at 4:00 p.m. and expired at 5:25 p.m. on the 10th hospital day. Could we see the last film?"

Dr. Sloan: "A portable chest film was obtained during the last 24 hours of life. Fine details are obscured by respiratory motion, but there appears to be some scattered patchy densities most obvious at the right apex and the left base. A terminal bronchopneumonia or aspiration could easily explain these changes. There has probably been no gross change in the heart and great vessels, although accurate comparison with the earlier routine chest film is not feasible. The diaphragm is at a normal level for a study of this type."

Dr. Artz: "Well, now one has to sort out from this what is the most likely sequence of events. I would say that most likely this woman had gallbladder disease, probably long standing with a stone some place low in the common duct. I would think that probably this stone might have blocked the outpouring of pancreatic secretion, and she developed pancreatitis. The pancreatitis was probably very severe and there was destruction of the islet cells of the pancreas or she may have been previously diabetic. The terminal events certainly look like peritonitis and fulminating infection, common in a diabetic."

Dr. Joel Brunson: "Are there other comments? Dr. Arhelger will discuss the gross findings in this particular case."

AUTOPSY REPORT

Dr. Arhelger: "The heart showed no apparent gross abnormalities. Each pleural cavity contained approximately 200 cc. of straw-colored fluid. The lungs showed marked hyperemia and edema throughout, and there were numerous tiny abscesses in the upper lobes, particularly on the left.

"The peritoneal cavity contained approximately 300 cc. of straw-colored fluid, and there were innumerable glistening, hard, white nodules measuring up to 0.5 cm. in diameter scattered throughout the omentum and mesentery. These were particularly prominent around the pancreas with a great deal of necrosis present in the omentum and

mesentery in this area also. A shaggy, greenish exudate covered the stomach and small bowel in the region of the pancreas.

"The liver was enlarged, weighing 1770 gm.

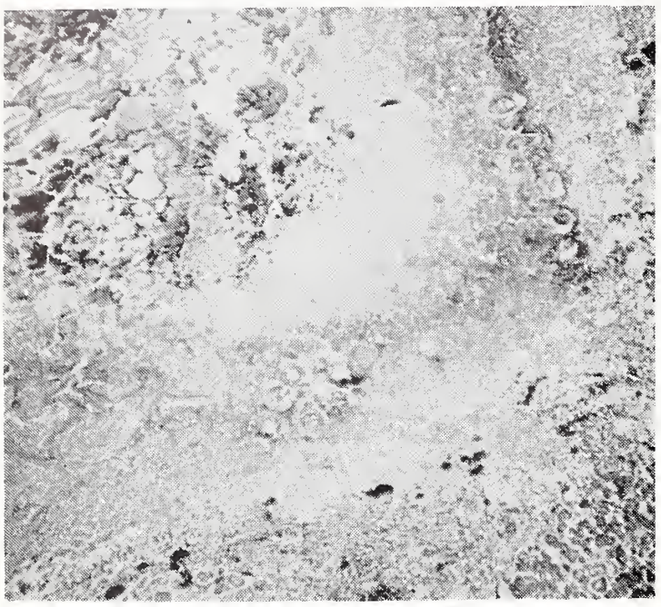


Figure 1. Section of pancreas showing necrosis and inflammatory reaction.

and, on cut section, the surface was tan-brown in color mottled by irregular small areas of yellow color. The gallbladder was moderately enlarged and filled with brown calculi up to about 0.4 cm. in diameter. No stones were found in the ductal system, however. Several small vessels in the area of the pancreas appeared thrombosed. The main pancreatic duct was free of obstruction. The body of the pancreas was necrotic, very mushy, and was adherent to the greater curvature of the stomach by necrotic fibrous adhesions.

"The kidneys were of approximately normal size and the capsules stripped with ease revealing a coarsely granular grey-pink surface with dilated capillaries and numerous cysts measuring up to 1.5 cm. in diameter. On cut section the corticomedullary junctions were not distinct and the small vessels protruded from the cut surface. The only other finding of note was multiple leiomyomata in the uterus. The blood culture which we took at time of autopsy grew out coagulase positive *Staphylococcus aureus.*"

Dr. Brunson: "There are several points that are of interest in this case. As Dr. Artz has already brought out, the problem concerning the patient's diabetic state warrants consideration. Another point of interest is the peculiar finding of a normal cardiogram in the fact of what she has microscopically. Finally, the morphologic changes in her pancreas do not appear to coincide with the duration of her illness. Microscopically, there is almost complete destruction of the pancreas. There are occasional areas of reasonably normal pancreas, but, by and large, most of it is a hemorrhagic mass with thrombosed vessels, a good deal of fibrinous exudate, and fat necrosis. Intense aggregates of acute inflammatory cells as well as some macrophages are present about these necrotic areas.

"These acute changes suggest that this lesion has been present for less than 10 days, and as such do not correspond to the clinical history in the case. I would wonder, therefore, whether she did not have some complaint referable to her gallbladder when she first came in, rather than to her pancreas, for it seems to me that this lesion is inconsistent with pancreatitis of 10 or 11 days' duration.

"Microscopic sections of the heart also show profound changes. In the left atrium there is an extensive area of necrosis and acute inflammatory reaction. The latter is composed largely of polymorphonuclear neutrophils with smattering of lymphocytes and plasma cells. Large portions of the atrial muscle appear to have undergone necrosis. Sections from the left ventricle show a somewhat similar alteration. Large areas of muscle appear to have undergone ischemic necrosis, accompanied by an acute inflammatory reaction. These lesions are quite extensive in all of the sections we have from the left ventricle, and one can

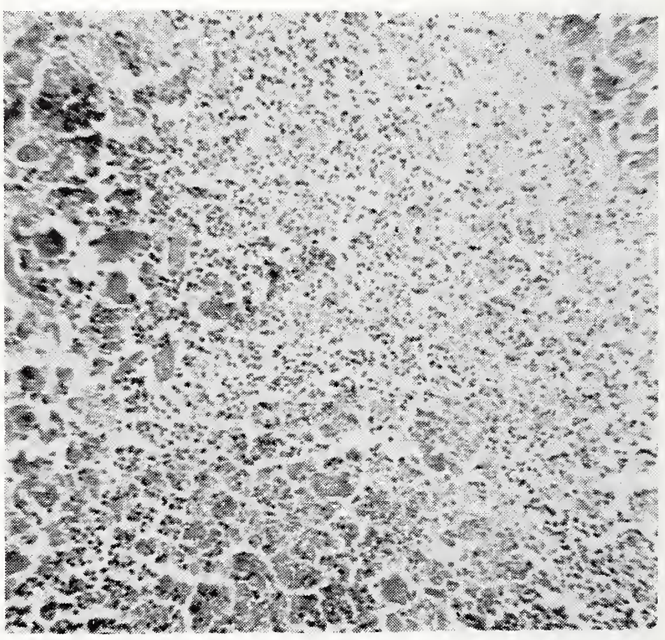


Figure 2. Section of left ventricle showing extensive inflammation and loss of muscle fibers.

only wonder whether or not these occurred after an electrocardiogram was taken. At least, one would suspect that changes would occur in a tracing as a result of these lesions. Other sections from the ventricle show that these areas of necrosis are associated with thrombosis of the intramural coronary arteries. This appears to be the initial change, resulting in ischemic areas of muscle necrosis with preservation of the architectural pattern. These thrombi are also noted to contain clumps of micro-organisms, presumably staphylococci, indicating that the thrombi are of septic origin.

"As I mentioned previously, we are interested in the probability of diabetes mellitus in this patient. It is probably a good bet, but the morphologic changes which would enable one to make a histologic diagnosis of diabetes may not be present in all cases. That is, if one finds extensive hyalinization of the islets of Langerhans, or if one finds the particular type of glomerular-renal vascular lesion, he feels secure in diagnosing diabetes mellitus. This patient does have in the pancreas occasional islets which show hyalinization,

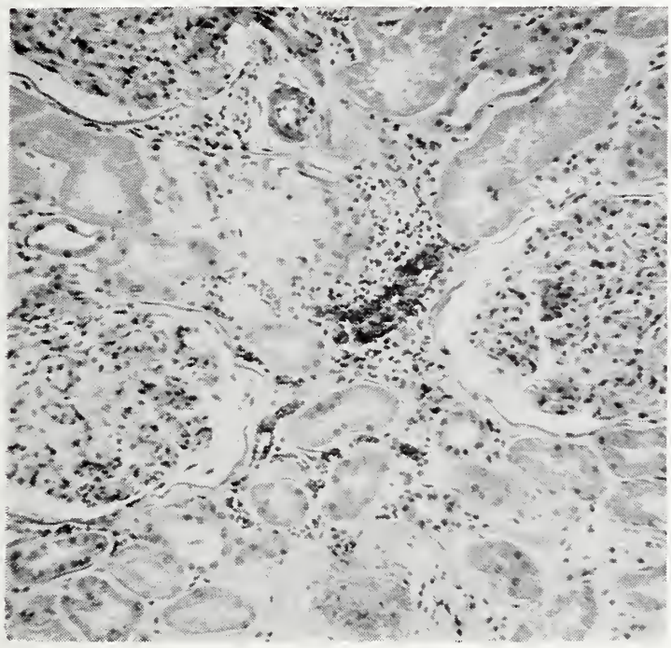


Figure 3. Section of kidney showing thickening and coalescence of glomerular capillary loops and hyaline thickening of arterioles. The proximal convoluted tubules contain intracytoplasmic hyaline droplets.

but these are not extensive enough to warrant a diagnosis of diabetes mellitus.

"On the other hand, she does have vascular lesions in the kidney which may be simply a reflection of pressure changes and not the changes associated with diabetes. For example, many of the renal arterioles show a fairly marked hyaline thickening of their walls. The glomeruli, on the other hand, show a minimal degree of thickening of the capillary loops and some coalescence of

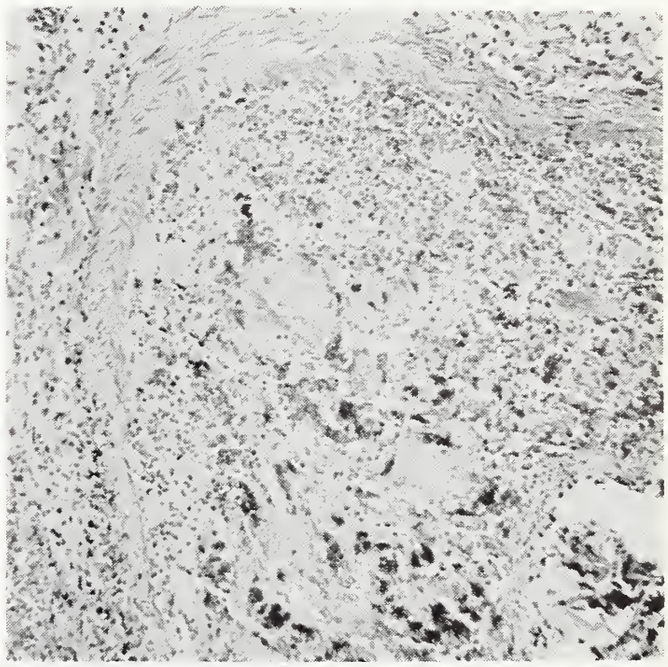


Figure 4. Septic thrombus in pulmonary vessel.

capillaries but not of sufficient degree to enable one to diagnose diabetes. The vessel changes more nearly resemble those that are associated with an accelerated type of hypertension, but the concentric arteriolar intimal hyperplasia is not present, so that a dogmatic statement regarding this disease cannot be made. One can only say that the changes suggest that this patient was bordering on a malignant phase of hypertension.

"The other change in the kidney is one that we commonly associate with filtration of protein; that is, accumulation of hyaline droplets in the cytoplasm of the proximal convolution. We believe these droplets represent filtration and resorption of protein, and are not evidence of degeneration of the tubules. It is a little bit disconcerting not to have a little further examination of the urine in this patient.

"Changes may also occur in the liver which would enable one in some cases to at least suggest a diagnosis of diabetes. When present, the changes are a reflection of glycogen in the nuclei and they stand out as vacuolated areas in the cell. One does not see that in the liver cells in this patient. This is a reversible phenomenon, however, and does not occur in patients who are on adequate insulin therapy. So we would not really expect to find that in this patient who has been given adequate insulin. Other than showing an excessive accumula-

tions of chronic inflammatory cells about the portal triad, perhaps an indication of an underlying cholecystitis, the liver sections from this patient are not rewarding. She does have, however, histo-

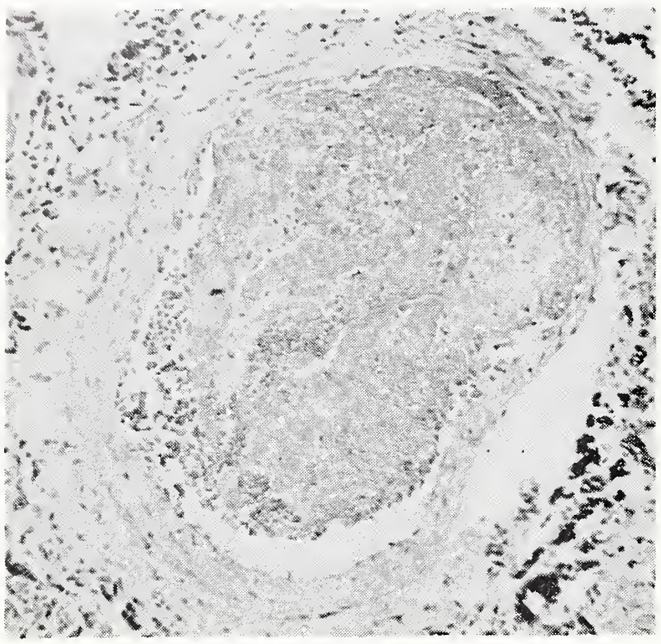


Figure 5. Bland thrombus or embolus in pulmonary vessel.

logic evidence of smoldering chronic cholecystitis, but it is not very pronounced.

"Her lungs are perhaps one of the factors that contributed to the demise of this patient, in addition to the pancreas. There are fairly large areas of abscess formation in the lungs, associated with intense congestion and pneumonia. In many areas clumps of staphylococci are present, and these are associated with complete destruction and necrosis of portions of the lung. Septic thrombi, containing myriads of staphylococci, are also observed. Other sections of the lung show what appear to be bland thrombi or emboli; it is difficult to be certain whether these came from a distant location or were formed *in situ*.

"In summary, it is our feeling that this patient had a hemorrhagic pancreatitis. It seems that this is probably less than 10 days' duration, morphologically. There is no evidence of previous or chronic pancreatitis. She also has evidence of a terminal staphylococcal infection, with pneumonia, pulmonary abscesses, and septic thrombosis of the intramural coronary arteries with areas of myocardial necrosis. The renal vascular changes are suggestive of hypertension bordering on a malignant phase. We were not able to establish with certainty the diagnosis of diabetes mellitus, but we lean strongly toward that. Dr. Artz, would you care to make a further comment?"

Dr. Artz: "We had absolutely no history of diabetes. Did anyone go back and ask the people who talked to her whether or not there was any history of diabetes in the family? Did we have a good history?"

Dr. Arhelger: "I do not believe we did."

Dr. Artz: "At least as far as we know she had not had diabetes previously. Didn't you think this was quite a fulminating process with all the hemorrhage in the pancreas to give such a small quantity of fluid in the peritoneal cavity and such a benign history?"

Dr. Brunson: "I wonder if she was not in shock even with a blood pressure of 150/110, or at least a relative state of shock. In my recollection, as I say, I have not seen a pancreas with this type of change which was 10 days old."

Dr. Artz: "You mean they die earlier than this?"

Dr. Brunson: "Yes."

Dr. Artz: "That is what I was thinking. A patient who had this type of pancreatitis should have died on the fourth or fifth day. Seeing the pathology would make me think that the glucose level was due to the inability of the pancreas to produce insulin, but the things you see make you think that she probably was a diabetic previously."

Dr. Brunson: "Yes. I wonder if she did not develop pancreatitis while she was in the hospital. She may well have had initial symptoms from a gallbladder calculus, which later passed." ★★★

2500 North State Street

ALOHA ALOPECIA

There's a new chemotherapeutic agent for receding hairlines: It doesn't grow any new hair but rather shrinks the head to fit what's left.

MSMA Testimony on H.R. 4222

GEORGE E. TWENTE, M.D., and H. H. McCLANAHAN, JR., M.D.
Jackson, Mississippi
Columbus, Mississippi

In the Congress, the debate is the payoff. The King-Anderson bills, H.R. 4222 and S. 909, compulsory health care for the aged under Social Security, were introduced February 13, 1961, and have been subjects of continuing interest in all spheres of public interest. On July 24, formal hearings on the King bill were begun by the House Committee on Ways and Means.

The Mississippi State Medical Association was one of 12 such organizations selected to testify. Witnesses were Dr. George E. Twente, Jackson, and Dr. H. H. McClanahan, Jr., Columbus. This article is a verbatim reproduction of the formal text of their testimony—a story of private health care progress in Mississippi.

WE ARE DEEPLY GRATEFUL for the privilege of appearing before your committee to discuss the views of our association, a 105-year-old scientific professional society of about 1,400 physician-members, with respect to H.R. 4222 and similar bills pending before the Congress. These policy positions are those of our association, established by the Board of Trustees and reaffirmed on four occasions by our House of Delegates during the period 1958 through the present year. The viewpoint of this testimony is, therefore, an accurate reflection of what Mississippi physicians believe and support in their unified goals of providing the best possible medical care to all citizens of our state without qualification or regard as to age, race, sex, creed, or political persuasion.

PURPOSE OF TESTIMONY

Our objective in offering these views is to join with all concerned in fulfilling every valid obligation to the aging, with full respect for the dignity of the individual. We believe, too, that your committee seeks these same meritorious goals with serious concern.

As physicians, we recognize and accept our traditional professional obligations. We emphasize our concern for the aging and are, of course, grateful for the determining contribution which our profession has been able to make in extending the human lifespan. In substance, this was the theme of the discussion I was privileged to present to your committee on July 17, 1959, when H.R. 4700 was under consideration. We have further substantial progress to report in the positive program of achievement in the field of service to the aging which continues to gain momentum in Mississippi.

We express our appreciation for the significant work of this committee and we applaud your sponsorship of H.R. 12580, later enacted by the Congress as Public Law 86-778 in 1960. Mississippi has joined with other states in implementing this program which was wisely and appropriately

Presented before the Committee on Ways and Means, House of Representatives, 87th Congress, First Session, July 27, 1961.

Principal witness for the association.

Associate witness and chairman of the Board of Trustees, Mississippi State Medical Association.

associated with Title I of the Social Security Act. We further applaud your committee's prudence and judgment in declining to place health services for the aged under Title II with attendant loss of flexibility, restricted application to the aged themselves, burdensome tax costs upon wage earners and employers, federal centralized management with insufficient or no local prerogative, and the distinct probability that this and any similar program of compulsory participation will undermine the American system of medical care which we believe entirely adequate to meet present and foreseeable goals of excellence, quantitative sufficiency, and universal availability for all citizens.

In opposing enactment of H.R. 4222 and similar measures, we restate these views with renewed emphasis upon our previous reservations and with additional reasons to repose confidence in the integrity, soundness, practicality, and utility of American medical science and existing means by which health services for the aging are being improved and provided.

May I summarize what we have been able to do as part of our people-business-local government team, with emphasis upon the gains of the past two years.

MORE CARE FOR MISSISSIPPI

All should recognize that any financing mechanism for health care services—public, private, or a combination of both—however effective, is useless unless there are available competent providers of care, optimally distributed, in sufficient numbers. In Mississippi, we have this capability.

In the short span of 10 years, the number of physicians in our state has increased about 16 per cent while the population total has remained virtually static. But this notable growth doesn't tell the whole story because in this same brief period the number of doctors of medicine under age 40 has almost doubled; there are about 34 per cent more in the 40-49 age group; there has been a 70 per cent gain in those aged 50-59; but the number of physicians over age 60 has decreased 33 per cent. This means that four out of 10 Mississippi physicians are under age 40 and more than six out of 10 are under age 49. It also means that they are recently—and consequently better—trained. They are able to take immediate advantage of scientific advancement, serving more patients with better care, a net result of geometric service increase with an arithmetic growth of doctors.

In only 15 years, Mississippi has undertaken and completed a $50 million hospital construction and expansion program in which 127 projects have supplied the state 3,765 new and additional beds. This is exclusive of federal medical facilities which will soon add more than 1,000 new or replacement beds. Progress in hospital, medical and related facilities construction is, if anything, now accelerating with 62 projects presently under construction to supply 800 more beds in a $15 million program. There are 28 hospital projects approved but not yet under construction which will supply 378 beds at over $8 million. Thus, our present and immediately programmed hospital facilities offer about 14,899 nonfederal general medical and surgical and special purpose beds in optimally deployed institutions.

HEALTH PLANS FOR SENIORS

Mississippi Blue Cross-Blue Shield pioneered in package coverage contracts for senior citizens. Since inception of this program in 1958 with about 13,000 enrolled, the number protected has more than doubled. The modestly priced coverage—only $6.50 per month—offers a $200 surgical



Drs. George E. Twente, left, and H. H. McClanahan Jr. right, show Congressman John Bell Williams MSMA's testimony on the King Bill during hearings at Washington. Mr. Williams presented the medical representatives to the committee. (News Associates photo)

service schedule, 30 days hospital service per admission with drugs, laboratory services, x-ray, and most other ancillary services paid in full. A valuable option now available to those over 65 is a catastrophic care endorsement covering total charges up to $2,500 per admission for additional payment of $1.50 monthly.

Private insurance companies in Mississippi have been successful in extending over-65 health insurance coverage. Our Mutual of Omaha Senior Security program in Mississippi protects 13,000 persons, is noncancellable, available regardless of past or present health, contains no waivers, and is guaranteed to continue in force without increase in premium. Other companies are making similar progress.

THE KERR-MILLS PROGRAM

We agree with the policy of the Congress to help those who need help, as shown in enactment of Public Law 86-778. In Mississippi, we have our own four-fold program of service for the indigent sick. We recognize these programs as being essential because a majority of these citizens are indigent before they require medical care and, hence, neither the insurance-voluntary prepayment mechanism nor a Social Security program could assist in their care. It is, then, a matter of common sense and economy to mobilize local resources, strengthened by the Kerr-Mills program, to provide these services. We feel that each state knows its own particular problems better than the federal government and we believe that such services should be available to all needy citizens without the burden of special, excessive taxation upon present and future wage earners.

Altogether, we are providing almost 300,000 patient days of diagnostic, medical, surgical, and chronic care annually to the indigent sick under a multiple, nonduplicating program. Our State Hospital Commission furnishes over 101,000 days of care each year for citizens of all ages. Using a $1.5 million state appropriation, this totally nonfederal program is effective in 77 of our 82 counties, the remaining five having state hospitals which assume this responsibility. Local hospitals are utilized, local physicians render professional services gratuitously, and a *per diem* reimbursement is paid to the institution on a cost-or-maximum basis.

Our four state hospitals offer 418 beds for the indigent sick, furnishing more than 100,000 patient days of care annually by nonfederal means. Again, our physicians provide gratuitous professional services. Our new and modern University of Mississippi Hospital, the clinical adjunct to our four year medical school, is devoted for the most part to service patients, furnishing 66,000 days of care annually, also without federal funds for this purpose. The University supplies about 50,000 outpatient diagnostic and treatment visits and 15,600 emergency room visits annually to this same patient category.

OAA HOSPITAL SERVICE

In April 1961, a hospital care program was initiated through the Department of Public Welfare for recipients of Old Age Assistance under Public Law 86-778. Provisions have been made for 15 days care per admission for those over age 65 to include full hospital service for room, general nursing service and supervision, meals and dietary service, operating room, treatment facilities and equipment, physical therapy, anesthesia services by hospital employees, administration of blood and blood plasma, intravenous fluids, x-ray examination, electrocardiograms, various hospital-oriented diagnostic tests, and therapeutic procedures. Hospitals may receive $15 per day and the program is financed by a state appropriation of $512,000 for the first year which has been matched by an additional 65 per cent federal percentage plus the 15 per cent federal medical percentage under Title I as provided in the new law.

There are 81,000 OAA recipients in Mississippi, all of whom have been informed of their eligibility for these services and who have been provided a means of identification in seeking them.

Additionally, many hospitals and individual physicians provide further in- and out-patient services to the indigent sick privately. Thus, Mississippi has (1) a state financed medical assistance program for all ages, of 25 years duration, (2) an active, implemented OAA medical vendor program as contemplated in Public Law 86-778, (3) sufficient flexibility through program diversification to meet valid needs locally, and (4) a proved willingness and capability on the part of the medical and allied professions as well as our hospital industry to carry out these programs in the interest of all citizens.

NURSING HOMES

Since appearing before your committee only two years ago, I can report a growth of about 25 per cent in the number of licensed nursing homes. More importantly, there has been an 80 per cent increase in the number of licensed beds which now total more than 2,800. These facilities are

distributed by population centers, there being 97 homes in 35 counties. Construction and expansion of additional facilities is planned.

The Mississippi State Medical Association has been successful in contributing to our state's overall positive program in the field of aging through socioeconomic and scientific research. We have worked productively in concert with public and private groups in the extension of knowledge and technic with respect to health care of the aging.

WHY WE OPPOSE H.R. 4222

With this deeds-not-words philosophy, we oppose H.R. 4222 as being unneeded, extravagant, intrinsically incapable of doing the job it purports to do, and as that final step through the portal of federal dependency from which return to local initiative is unlikely.

Enactment of this legislation would provide no solutions to Mississippi problems which are not already or cannot soon be met by local means and existing legislation. We feel it exceedingly unwise to repose virtually unlimited health care authorities in the federal government only to witness the building of more centralism, more encroachment upon the state communities, and more denial of local prerogatives, and more tax expenditures.

We doctors distinctly prefer to go about the practice of our profession, doing what we can for those unable to purchase medical care without national exposure of philanthropic aspects inherent in our work. But we do come reaffirming again our confidence in people over government as providers for human need. We reaffirm our confidence in the voluntary over the compulsory way, in helping those who need help, and in fiscal integrity which must be as much a part of public systems of health care as in other governmental functions.

In this context of sincerity, we oppose the present legislative proposal before your committee but in so doing, we pledge again the total resources of the Mississippi State Medical Association toward bringing quality and quantity medical care to all citizens of our state. ★★★

710 North State Street (Dr. Twente)

HEAVENLY AID: TAXBITTEN TOO

A little boy wanted $100 and decided to pray for it. When he had prayed steadily for two weeks without any result, he sat down and wrote God a letter. The postman didn't know where to send such correspondence, so he forwarded the youngster's note to the President of the United States. After reading the boy's request, the President told his secretary to send him $5. The boy was delighted and wrote God immediately, thanking Him for such a prompt reply. "Dear Sir," the note said, "I notice that you routed your letter through Washington. As usual, they deducted 95 per cent."

—Savings & Investment

SPECIAL ARTICLE

The Film Badge and the Cricket: An Exercise in Political Medicine

MARSHALL BRUCER, M.D.
Oak Ridge, Tennessee

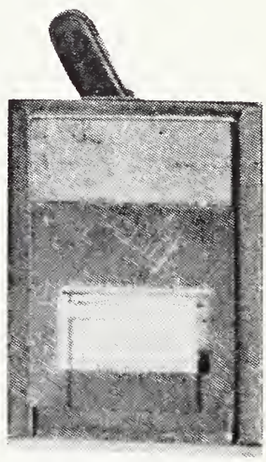
A FEW HUNDRED YEARS AGO there were no nurses. The possessor of a degree in natural philosophy was a rarity. No university could guarantee that a man was capable of treating the sick. Now you can't practice nursing or medicine without first convincing the state that you are qualified. The Ph.D. has an even more stringent licensing to go through; he must convince his associates that he is capable.

The degree that you receive from a school does not guarantee that you are capable, but it does guarantee that you have been selected with that idea in mind, that you have been exposed to a period of training, that you have been examined in your competence and that presumably you are capable. This is a remarkable achievement, both for the school and for the students who have passed through the school.

A century ago there weren't many people to take care of the sick, and few people were expected to live very long. The population is increasing by an exponential function. This means that more people are alive now than have been buried in all previous history. One reason is presumed to be the ministrations of those who know how to take care of people who might die too soon. The success of medical science has grown into a demand for more medical scientists. The lone practitioner over a hundred years ago had little knowledge but tremendous authority. Apparently as specialized knowledge increases, our capacity to judge from all knowledge decreases and the authority of the individual decreases in proportion. But the responsibilities and the problems that yield these responsibilities are the same as they used to be.

Read before the Commencement Exercises, University of Mississippi School of Medicine, Jackson, June 11, 1961.

During the past decade we have been developing a "new" form of power—atomic energy. It is not divorced from medicine because people may get hurt, and when they do they will need both a "new" diagnosis and a "new" therapy. But we have been through all this before. Our fathers worried about the gasoline engine and our grandfathers worried about steam. It looks like we are repeating the same mistakes.



The Film Badge

A front page story in the *New York Daily Times* for May 6, 1852, was a dispatch from Harrisburg, Pa., stating that three boilers of the stationary engine on the Portage Railroad had burst, killing three men. We didn't know how to make pipe in 1852, and we didn't know how to put together what pipe was available to make a leak-proof joint, and so boilers blew up. Steamboats blew up. These were major disasters. Congress investigated; foolish laws were proposed. The new form of energy did some good and therefore it had to be lived with, but it also caused some harm. People were hurt and therefore doctors were involved. A few days



The Cricket

later, on Tuesday, May 11, 1852, the *New York Daily Times* carried another story.

> The steamboat men of St. Louis have held a public meeting, at which they suggested the necessary measures to prevent a recurrence of the terrible steamboat disasters of the Western waters; expressing their candid anxiety for the adoption of restrictive and cogent laws for the better protection of life and property, only asking that they may not be subject to useless and uncalled for expenditures and restrictions.

A 'NEW LIGHT'

In 1896 another new form of energy was announced. Roentgen announced a "new light," the x-ray. This new kind of radiation almost immediately became a diagnostic aid. But we had not learned how to completely control radiation so just as with the steamboat, some people were hurt. This led to the first radiation hysteria. Courts sat in judgment; legislators passed laws. Although physicists spent a quarter of a century looking for ways to measure the "new light," and biologists spent a half century attempting to assess the potentiality of damage, radiation did not become a common household word until the Second World War. Apparently it takes a major disaster to make a new form of energy newsworthy. This occurred in 1945.

The explosions of a few boilers made "steam" synonymous with "destruction" during the 19th century. The explosion of a few atomic bombs made "radiation" synonymous with "death and destruction" in the 20th century. The Elizabethans that still survived during the 19th century had a pat answer: legislation, regulation, and restriction. The Cro-Magnon men who still survive in the 20th century have observed the dirty bath water and want to throw out the baby.

USEFUL APPLICATIONS

The first useful application of radiation was in medical diagnosis. Almost immediately it was found to be useful in some, but not all, kinds of therapy. The first useful application of radioisotopes, even before the bombs were dropped, was in diagnosis. During the first 15 years after the bombs were dropped, between 1 and 3 million persons received a diagnostic test with an isotope of iodine. During the first 15 years, between 100,000 and 300,000 people were successfully treated for a disease with one isotope of iodine. This is an order of magnitude greater than the number of people who have been killed with atom bombs. But the baby is dirty. We must destroy him.

During 1950, 2,500 shipments of radioiodine were made from the United States Atomic Energy Commission for medical purposes; during 1955, more than 5,000 shipments of radioiodine were made. Radioiodine yields successful diagnosis and successful therapy. But during 1960 only 2,500 shipments of radioiodine were made from the United States Atomic Energy Commission, and by January of 1961 the medical production of radioiodine had shifted to Canada. Overregulation is stopping production in this country. Somewhere along the line we have lost our perspective.

FALLOUT RADIATION

No one has been known to have been hurt by distant fallout radiation, and yet fallout is considered a dreaded accompaniment to nuclear testing. A nuclear reactor was to be built near Detroit, Mich., to produce power in a power-hungry economy. Last month the Supreme Court of the United States was asked to decide on the inherent dangers of nuclear reactors. This is necessary and proper. The Supreme Court is competent to judge anything they choose to judge by whatever method they choose. Mr. Justice Frankfurter queried the Solicitor General on how a decision had been reached by the Atomic Energy Commission: "Who were the Commissioners who sat?" . . . "Was any of these the scientific member of the Commission?" The Solicitor General answered, "No, none of them." A scientific question, primarily one of safety, has been argued with the demand for 100 per cent, sure-shot, no-risks-allowed safety in the face of the AEC's safety record—one of the best ever achieved. The question is argued on a point of law, not on the balancing of risk and benefit.

An isotope of hydrogen—tritium—has been proposed to illuminate automobile locks. This is not a new idea; radium can be used. If the regulators were really interested in "danger," they would welcome the use of tritium because tritium, by any definition of danger, is much safer than radium. Or was the decision to regulate prompted because the present writers of federal regulations have legal foundation for regulating only what the federal government sells? The words "danger" and "safety" are, at least in part, medical words. But no physician testified to the Supreme Court that the 1957 Windscale reactor accident in England hurt some people; it didn't. A lawyer testified that the radioactive gases that escaped through the chimney of the reactor proved to be "considerably more radioactive than those produced

by the Hiroshima type bomb." This is equivalent to saying that bananas have considerably more banana peel than Brazil nuts, a snide distortion of a true statement. No medical assessment of benefit and risk has influenced the regulations on tritium. Somewhere along the line the scientist has lost his authority.

It is well known that a firecracker in the hands of a small boy is dangerous; here we can solve the whole problem by legislating against firecrackers. Unregulated smoke causes a bad smog; therefore, we should regulate the production of smoke. Cranberry weed killers can cause cancers in mice; do away with cranberries. Saturated fatty acids might cause heart disease; do away with the meat industry. Books might be obscene; do away with books. Obesity causes death; do away with eating and we cure everything in one generation. The standard answer to all problems of safety has become legislation, regulation, and restriction. When the country was young, this was adequate; but hysterical multiplication of this same answer defeats its own purpose.

FALTERING PROGRAMS

During March, on the floor of Congress, Representative Melvin Price made the following remark, "I regret to say that the U. S. domestic and international atomic energy programs have been faltering in the last several years. . . . I cannot help but observe that the same group of scientific advisors who have crippled advanced scientific development for the past 10 or 15 years are still around." United States Representative Thomas Ashley made the statement, "The result of this tangled web of regulations . . . is that the Department of Health, Education, and Welfare and the Atomic Energy Commission are in a complete maze of interlocking and conflicting claims of jurisdiction . . . when the Federal Radiation Council . . . is added to this already confused hodgepodge, the situation becomes completely chaotic." If I were a practicing politician I would consider physicians of little value in a situation where the remedy must be statutes and regulations. But, in medicine, I know that two poor remedies do not equal one good one; and I suspect the same is true in law. This is medical diagnosis, research, and therapy that is being spoken of, but somewhere along the line the doctor has lost his authority. It is interesting to speculate on why.

Two gadgets illustrate what has happened. One is the film badge; the other is the "cricket." The film badge is more than 50-years-old; the cricket is just this month in commercial production. When the film badge (worn in a "ring," or a "bracelet," or pinned to the clothing as a "badge") is exposed to radiation, it gets black. When the cricket (which looks like a fountain pen flashlight) is exposed to radiation, it chirps.

PREVENTION OR PUNISHMENT

When the film badge is worn by a person, it makes a record of exposure to radiation. But to show this exposure, the film badge must be taken off the person, sent to a photographic technician, the film developed, the amount of blackness measured, calibrated, recorded, and then approximately two weeks later the person who was exposed knows that he has been exposed.

When the cricket is exposed to radiation it chirps faster and louder as radiation increases until it screams in a loud and raucous tone. The person who is wearing the cricket knows immediately that he is being exposed to radiation and there is only one thing to do: get out of that area. So far this is the only effective "cure" for radiation exposure: don't be exposed.

The cricket leaves no record, but a record is obligatory under the law. The film badge is a permanent record; it is acceptable legal evidence. The film badge record can be legislated around; its readings can be reported; and it is subject to administration. The cricket does nothing more than prevent an exposure. It is important to nobody (except of course to the wearer). Regulation, and especially restrictive regulation, cannot be implemented unless it can be legally proved. Apparently the whole purpose of preventive medicine of radiation exposure has been changed from telling a person "how to prevent," to a philosophy of punitive vengeance after the fact.

CONTINUOUS RESEARCH

The whole history of medicine is one of continuous research, in order to predict what will happen in the future. When this prediction is successful, it is applied to persons. It then becomes a diagnosis. When a reasonably accurate diagnosis can be made (it is too much to expect a completely accurate prediction) some form of therapy is usually prescribed. The most important kind of therapy is prevention of further occurrences. But preventive medicine is valuable only when it is applied before the fact.

The history of laws and regulations was originally the same as that of medicine—to prevent unfortunate recurrences. But somewhere along the line both law and medicine have gone off the track. The law has tended to become punitive, and medicine tends toward only description of what

has already occurred. In the one small field of radiation dangers, and there are dangers as well as benefits from radiation, the film badge and the cricket illustrate what has happened. The film badge symbolizes the punitive; the cricket symbolizes the preventive. The film badge is a symbol of political medicine; the cricket is a symbol of preventive medicine.

My generation has fallen flat on its face. The next generation of nurses, physicians, and other scientists will have to decide between punitive medicine and preventive medicine. ★★★

THE ELECTORAL COLLEGE: NO GRADUATES

Republican Senator Keating of New York, a strong supporter of electoral reform, was shocked to learn recently that 34 per cent of the public believes that the electoral college is the school where Congressional children go. "The electoral college has no campus, no classrooms, and positively no football team. Nobody, not even the President, graduates from it," Keating commented wryly, then added: "But then, I suppose some people also think Senate pages are something you write on and that diplomatic immunity is a form of vaccination."

The Insider's Newsletter

MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Nov. 27-30, 1961, Denver, Colo. F. J. L. Blasingame, Executive Vice President, 535 N. Dearborn St., Chicago 10, Ill.

American College of Surgeons, Oct. 2-6, 1961, Chicago. William E. Adams, Secretary, 40 E. Erie St., Chicago 11, Ill.

American Academy of General Practice, April 6-13, 1962, Las Vegas, Nev. Mr. Mac F. Cahal, Executive Director, Volker Blvd., at Brookside, Kansas City 12, Mo.

Southern Medical Association, Nov. 6-9, 1961, Dallas, Texas. Mr. Robert F. Butts, Executive Secretary, 2061 Highland Ave., Birmingham, Ala.

STATE AND LOCAL

Mississippi State Medical Association, May 8-10, 1962, Jackson. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson.

Mississippi Academy of General Practice, Sept. 27-28, 1961, Jackson, Miss. Miss Louise Lacey, Executive Secretary, Walthall Hotel, Jackson, Miss.

Amite-Wilkinson Counties Medical Society, First Tuesday March, June, September, December. S. E. Field, Centreville, Secretary.

Central Medical Society, First Tuesday Monthly, 6:30 p.m., Robert E. Lee Hotel, Jackson. George E. Gillespie, 514-A East Woodrow Wilson Drive, Jackson, Secretary.

Claiborne County Medical Society. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Second Wednesday March and November, 2:00 p.m., Clarksdale. Robert R. McGee, 150 Yazoo Ave., Clarksdale, Secretary.

Coast Counties Medical Society, First Wednesday March, June, September, and November. Charles N. Floyd, 1412-23rd Ave., Gulfport, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday January, April, July, and October, 1:00 p.m., Hernando Motel Cafe, Hernando. L. L. Minor, Route 9, Memphis 9, Tenn., Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. A. Wayne Sullivan, 1204-21st Ave., Meridian, Secretary.

Homochitto Valley Medical Society, Fourth Tuesday Monthly, 7:30 p.m., Natchez Country Club, Natchez. W. T. Colbert, Natchez General Hospital, Natchez, Secretary.

North Central District Medical Society, Second Wednesday March and September. W. A. Middleton, 214 Summit St., Winona, Secretary.

Northeast Mississippi Medical Society, Second Tuesday March, June, September, and December, Tupelo. Thomas W. Wesson, 421 Main St., Tupelo, Secretary.

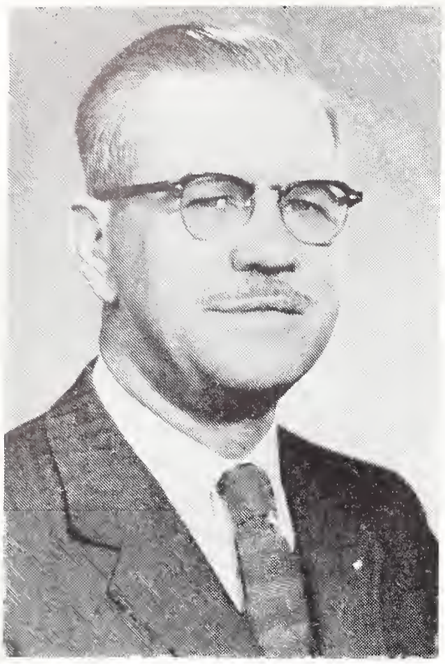
North Mississippi Medical Society, First Thursday January, April, and October, Oxford. R. L. Wyatt, Holly Springs, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. Samuel O. Massey, Jr., 220 E. Canal St., Picayune, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. Thomas F. Puckett, 715 Arledge St., Hattiesburg, Secretary.

Tri-County Medical Society, Second Tuesday March, June, September, and December. A. V. Beacham, Magnolia, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Tom H. Mitchell, The Street Clinic, Vicksburg, Secretary.



The President Speaking

'The Political Season'

LAWRENCE W. LONG, M.D.
Jackson, Mississippi

POLITICS ISN'T A DIRTY WORD but some Americans—including some physicians—seem to feel that it is. Politics, the art and science of government, the republican processes of representation, and *individual political responsibility* are everybody's business. The sooner all Americans find this out, the safer and surer our free heritage shall have become. This concept is especially applicable to professional persons because theirs is a unique position in society.

When someone says, "I'll leave this to the politicians . . ." *or* "My view is non-partisan . . ." *or* "I simply can't afford to get mixed up in politics . . ." each utterance contains a common fallacy. Politics *per se* is honorable and we are all partisan just as surely as we are male or female. These are fundamental characteristics of a free, self-determined people.

Politics has its seasons and one will soon be upon Mississippi. With the coming of 1962 will be the final regular session of the present legislature. In the spring and summer, the electorate will have the privilege of naming five members to the Congress, direct representatives of the people. Physicians should assume a leading role in these political seasons as a duty of citizenship and the Mississippi State Medical Association encourages each to do so.

The association assumes policy positions on issues—never on individuals because this would be neither a proper role nor would it be representative of its wide membership of varying political viewpoints. The association is now engaged in improving its organizational mechanisms to make its positions clear and understood. Only recently, the Council on Legislation was expanded from three to nine members, thereby affording representation for all nine association districts. An additional legislative liaison body to represent all 82 counties is being organized.

Doctors have the responsibility of seeking just and equitable laws with respect to health and medical care. They have a primary responsibility in preserving the traditional patterns of circumstances under which medical care is provided in this nation, free choice of provider, maximum private financing through voluntary prepayment and insurance, and above all, the responsibility of bringing quality and quantity care to all citizens. Each physician should examine carefully the qualifications for all candidates for public office, make a selection of his choice, and support his candidate with contributions and influence. Once elected, the public official who stands for these principles is entitled to the doctor's full support.

Can you be counted upon to discharge this duty of citizenship?

★★★

JOURNAL OF THE
MISSISSIPPI STATE
MEDICAL ASSOCIATION

Volume II, Number 9

September 1961

EDITORIALS

British Socialized Medicine: It's a Mess!

I

In the United States, agriculture under a maze of federal controls and subsidies is a mess. In Great Britain, nationalized medical care is a mess. In fewer words, socialism anywhere is a mess. And that's only the polite, good humored way of describing it because it more nearly approximates a national tragedy.

Our English cousins have recently observed the 13th anniversary of the National Health Service which was enacted under Labour Party sponsorship to become effective July 5, 1948. But the government-provided pill must be a bitter one to swallow because the same party, now filling the role of Her Majesty's loyal opposition after getting tossed out of office eight years ago, concedes grave deficiencies in its baby which shows all the earmarks of having grown into a retarded child, capable of less than its parents expected, and costing three times as much to keep.

In a new white paper, "Members One of Another," the Labour Party says this of the NHS: "Nearly half a million people are waiting for hospital beds. Too many doctors' surgeries (offices) are still grim and gloomy. Too many hospitals are still out-of-date and make-shift. The mental hospitals are overcrowded and dilapidated, and despite gallant efforts of those in charge, are quite unsuitable for modern psychiatric care. The committees and staff of the service have been frustrated by endless administrative delays, and inevitably, enthusiasm has been dimmed."

II

The ultimate victims of this waste and extravagance are the sick but the best measure of their plight is found in the system itself. And the circumspect, polite, refined British—for all their mastery of diplomacy, skill and courage in war, and personal industry—are finding out that they played the devil with health and medical care.

English physicians are overworked and underpaid. Hospital training is sadly wanting and the general practitioner receives less than 10 per cent of the entire health budget! Said the white paper: "The main reason for waiting in out-patient departments and delays over appointments and admissions (to hospitals) is the shortage of specialists staff. Despite what has been done, distribution and numbers of specialists are grossly out of step with need. While registrars (residents) queue up for specialist posts, patients wait for months at home because the specialist posts have not been created."

The hapless general practitioner, assigned a panel of patients numbering as many as 2,500, still has to ". . . look after far too many patients." His remuneration is miserable and has declined during the past decade. Amazingly, the paper states that "Indeed, more money is now spent on the drugs the G.P.'s prescribe than on the G.P.'s who prescribe them!"

III

The skeleton in the British medical closet is its hospitals. Since 1946, 127 new hospitals and additions have been constructed in Mississippi but in all of the United Kingdom, only one—that's correct, *one*—new hospital has been built. "For the rest (of the hospitals)," the paper admits, "it has been a matter of make do and mend, often in former public assistance institutions."

NHS institutions are experiencing a serious shortage of paramedical personnel. Labourites advocate extension of training but admit that ". . . this is not enough unless career prospects are satisfactory." Hospital management is lost in bureaucratic confusion, the white paper says, pointing out that "those who run our hospitals . . . are frustrated by too much central control and delay, too much paper work, too many returns and too many meetings."

IV

The British aren't without headaches over drugs, either. Costs under NHS have soared from £35 million to £63 million in 10 years. The Labour Party has a solution and that's generic prescribing, public patent rights, and cutting profits margins of pharmaceutical manufacturers. Either Senator Kefauver read the Labour white paper or the Labour Party read his new bill to clamp down on drugs, S. 1552.

England has no occupational health service and the party concedes that "The one great gap in Labour's National Health Service Act of 1946 was that it made no provision for health care at work." Medical research expenditures in Great Britain amount to but 2.7 per cent of the nation's total scientific research effort. Concedes the white paper: "In medicine, research openings are few and far between, and we are losing a stream of our best younger workers to America, where research opportunities are generously provided. As a result, the United States has taken over the lead in medical research which was once ours."

V

If the British socialists lack foresight, they are hardly wanting in pure gall for they blame the failure of NHS on the Conservative Party to whom the electorate turned eight years ago. Naively, they blueprint a program for revitalizing their failure in a concluding section entitled "On Towards Positive Health." They promise, plan, and cajole, omitting only waving the Union Jack and playing the national anthem. Put us back in office, they plead, and ". . . a Labour Government will ensure that medical need and not ability to pay is the true criterion of the National Health Service."

All of which proves just one thing: from Bismarck to Atlee, socialized medicine is a mess!—R.B.K.

Medical Malpractice

"In recent years, tremendous advances have been made in both medicine and dentistry. As a result, today's patient expects to be cured. He does not expect to have a lingering disability. If there is a poor result, he often criticizes the doctor. This criticism can turn into litigation."

This was the plainspoken preface to an address on the subject of professional liability and malpractice by William J. McAuliffe, Chicago, associate legal counsel for the American Medical Association, before a joint meeting of dentists and physician-members of the Northeast Mississippi Medical Society. While countless thousands of doctor-patient relationships are fruitful, satisfying, and effective in curing or mitigating the course of disease, that minutial minority of instances producing untoward results, patient dissatisfaction, or misunderstanding can result in a lawsuit. Mr. McAuliffe's remarks are pertinent and timely, worthy of summary as sound advice.

The courts have held consistently to established concepts in determining exactly what constitutes an act of professional liability. There should be no deviation from the basic criterion: the physician or dentist who undertakes care of a patient must possess and exercise the same degree of skill as commonly possessed and exercised by other reputable physicians and dentists in the community. Where the practitioner claims a specialty, he must meet the standards of practice of the specialist in his chosen sphere of professional interest.

"Every human being of adult years and sound mind has a right to determine what should be done with his own body," Mr. McAuliffe said. In this manner, he emphasized legal aspects of consent and liability arising out of what the law defines as an assault where consent is lacking or imperfect.

A notable point was made in reporting that 63 per cent of all suits arise out of surgical treatment and 67 per cent of all such cases are cared for in a hospital. Although most suits stem from allegations of poor operative results, poor medical results, error in diagnosis, and foreign bodies introduced into and permitted to remain in the patient's body, it is equally important for the professional person to recognize that suits originate from pressures exerted by relatives or others, desire for financial gain, and even the hope of avoiding payment for professional services.

Mr. McAuliffe concluded, quite logically, that a satisfied patient never sues. And it seems im-

portant to place "satisfaction" in proper perspective without a cause-and-effect relationship as to final result. The careful practitioner does his best —something for which few judgments are awarded, maintains adequate records, consciously seeks *rapport* with his patient, maintains professional proficiency, and is frank and fair about his fees.

Might any patient really desire more in a healer?—D. W. H.

AMA's Crippled Pigeon

Buried beneath an Aesculapian plethora of resolutions, reports, and oratory at the American Medical Association's 110th Annual Session at New York last June lies a disquieting action of the delegates: their approval of a national group accident and sickness insurance program. A 5,500 word report on it informed delegates of historical background, countless why's and wherefore's, and ended up recommending an insurance broker and carrier by name *but did not state a single provision of the proposed program nor mention the premium which would be charged.*

Some view this action as inappropriate, feeling the AMA has taken into its bosom a crippled pigeon which can neither stand nor fly. And their questions are these: Is it a proper function of the American Medical Association to sponsor group insurance of this type in competition with more than 40 state medical associations and many more local medical societies? Among the former, 45 per cent of the state medical associations have said that it is not. The lengthy study report admits that it is impossible for AMA to sponsor a program which does not compete with the states.

Will claims service be as prompt and effective in a nationally brokered program as in one where claims are adjudicated and paid in the state community? This, of course, remains to be seen but it's only reasonable to believe that on-the-spot service should be better than that of an administrator hundreds or thousands of miles away.

Since competition is inherent in the American free enterprise system, wouldn't this new national group plan be a healthy development, regardless of what it does to state association programs? No, say many states, because competition is already in the picture when the state program is chosen. What we have now, they point out, is duplication working against the doctor, something like this.

Under usual group organization, a "true" group is formed when 50 per cent or more of the total members purchase the plan. The more groups there are, the fewer true groups possible. This works against those members of the sponsoring organization who are uninsurable, since groups of *less* than 50 per cent are generally subject to medical underwriting. AMA's group will simply extend existing duplication if it shapes up like all the rest. Thus, no member previously unable to secure coverage will necessarily have it guaranteed to him.

Group insurance programs providing sickness, accident, and income replacement benefits are valuable, especially to the self-employed professional person. Tailored to special needs, they stretch premium dollars by lumping experience and cutting sales cost. They can supplement individual insurance portfolios at minimum expense. The secret of group insurance is its proper use, special role, and savings features. If critics of the AMA program are correct, then every physician should examine the plan carefully to make sure no crippled pigeons come home to roost.—R.B.K.

PERSONALS

William J. Anderson III of Meridian has opened practice in connection with his father William J. Anderson Jr. The new practitioner recently completed a four year residency in general and thoracic surgery at Confederate Memorial Center in Shreveport, La. A graduate of the University of Mississippi, Dr. Anderson received his medical degree from Baylor University College of Medicine in Houston, Texas. He interned at Confederate Memorial.

S. Lamar Bailey has recently been elected chairman of the Board of Trustees of the Kosciusko Separate Municipal School District.

William Eugene Birdsong has announced his association with the Cosby Clinic in Iuka. Dr. Birdsong has recently completed his internship at the City of Memphis Hospital. He received his medical degree from the University of Mississippi School of Medicine.

Jewell J. Breeland Jr. has opened his office in Brookhaven for the practice of general medicine. A native of Tylertown, Dr. Breeland is a graduate of the University of Mississippi School of Medicine.

Donald W. Brice has begun the practice of general medicine in Aberdeen. A graduate of Harvard, Dr. Brice received his M.D. from the Alabama Medical College and interned at St. Vincent's Hospital in Birmingham.

PERSONALS / Continued

GEORGE W. BYRNE has announced the association of Jare L. Barkley in his Pass Christian and Gulfport offices for the practice of general surgery. Dr. Barkley completed his premedical work at the University of Mississippi and received his medical degree from Harvard. He interned at Barnes Hospital in St. Louis and took one year of his surgical residency in Boston. While in the U. S. Air Force, he was base doctor at Vance Air Force Base in Enid, Okla. He finished his residency in surgery at the University Medical Center in Jackson.

CURTIS W. CAINE of Jackson addressed Mississippi Southern College's second annual Aviation Education Workshop on July 11. Dr. Caine spoke on "The Place of the Light Plane in America's Living Medicine."

WALLACE CALHOUN has been named a director of the Moss Point Chamber of Commerce according to James T. Thompson, president of the group.

KENNETH C. COFFELT has been named pathologist and laboratory supervisor for Biloxi Hospital. For the past four years Dr. Coffelt has been associated with the University Medical Center in Jackson.

DEWITT CRAWFORD has begun the practice of medicine in partnership with his father, John A. Crawford, at Louisville's Medical and Surgical Clinic. Dr. Crawford did his undergraduate work at Georgia Tech, the University of Mississippi, and Millsaps College. He is a graduate of the University of Mississippi Medical School and interned at John Gaston Hospital in Memphis.

H. LAMAR GILLESPIE of Jackson has announced his associaton with Ramsay O'Neal and William R. Raulston in the practice of obstetrics and gynecology. Dr. Gillespie received his medical degree from Tulane University and served his internship at the University Medical Center. He spent two years as a member of the staff of the obstetrical and gynecological department at the U. S. Army Station Hospital at Fort Gordon, Ga. Dr. Gillespie completed his residency in obstetrics at the University Medical Center where he was chosen outstanding resident for 1961.

ALBERT L. GORE of Jackson has announced the association of Irvin H. Cronin in the general practice of medicine.

JOE D. HERRINGTON JR. of Ackerman has been assigned to the Columbus Air Force Base Hospital as a general practitioner. Prior to attending the basic medical officer's course at Gunter Air Force Base, Ala., Dr. Herrington underwent one year of internship at the University Medical Center.

J. D. HUTCHINS has moved his offices from New Hebron to Mendenhall. Dr. Hutchins had served as a general practitioner in New Hebron for the past nine years.

MATTHEW F. KULUZ has opened his office for the practice of pediatrics in Pascagoula. Dr. Kuluz recently completed a residency in pediatrics at Charity Hospital in New Orleans on the Tulane University Service. He received his medical degree from St. Louis University School of Medicine.

BILL POTTER has begun practice in Madison. A native of Clinton, Dr. Potter was graduated from the University of Mississippi School of Medicine and completed a year's interning at the Mobile General Hospital.

WILLIAM H. SIEGRIST has announced the opening of his office in Jackson for a practice limited to orthopedic surgery.

PHILIP K. SPRINGER has announced his association with Herbert H. Hicks at the Washington Clinic.

ROBERT W. TAYLOR has announced his association with William L. Garner of Senatobia in the general practice of medicine. Dr. Taylor received his M.D. degree from Duke University and interned at John Gaston Hospital in Memphis. He has been in military service for the past two years.

VERNON L. TERRELL of Columbia has assumed the duties of county health officer for Marion and Jefferson Davis counties. He succeeds the late Dr. George S. Daly. Dr. Terrell has practiced in Columbia since 1933.

L. D. TURNER of Crystal Springs has been named president of the Copiah County Chapter of the University of Mississippi Alumni Association.

DANIEL TRIGG has been named pathologist for Greenwood-Leflore Hospital. Dr. Trigg received his medical degree from St. Louis University School of Medicine. From 1948-1952 he was in general practice and from 1952-1954 he served in the United States Navy. Dr. Trigg completed his residency at Ochsner Foundation Hospital in New Orleans June 30, 1961.

DAYTON E. WHITES has announced his association with the Lucedale Medical Clinic. Dr. Whites graduated from the University of Mississippi School of Medicine in 1960 and interned at Greenville General Hospital, Greenville, S. C.

Book Reviews

Heredity in Ophthalmology. By Jules Francois, M.D., professor of ophthalmology at the University of Ghent, Belgium. Translated from the French edition entitled *L'Hérédité en ophtalmologie* by Jules Francois. Cloth, 731 pages with 629 figures including six in color. St. Louis: C. V. Mosby Company, 1961. $23.00.

The reviewer feels that the title is too narrow in its connotation because it contains features deserving of a wide distribution.

This book, an English translation of the 1958 French edition, under the supervision of Frank Law, is divided into four parts: I. General Genetics, II. Genetics in Ophthalmology, III. The Hereditary Diseases of the Eye and IV. General Diseases With Ocular Manifestations.

Part I is composed of 13 chapters and in addition to the usual basic genetic information, chapters are devoted to "Heredity and Environment," "The Study of Twins" and "Elements of Statistics and Biometry."

Parts II and III contain four and 12 chapters respectively and are of interest primarily to ophthalmologists on subjects such as genes and their detection in ocular pathology and preventive management of hereditary diseases (eugenics). Of particular interest is material relevant to detection of the carrier state and counseling before and after marriage, offering a positive approach to a problem all too often viewed with apathy. Part II also contains a valuable list of heritable ocular defects with their modes of transmission. G. Verriest collaborated on the chapters dealing with functional abnormalities of the retina and anomalies of pigmentation.

Part IV contains eight chapters and should interest all physicians. Covered are metabolic disturbances, CNS and skeletal affections, diseases of the skin, blood and endocrine glands, arterial hypertension and syndromes. The latter is defined as "a clinical entity which does not present a series of symptoms involving a single organ or a single system, but which is characterized, on the contrary, by an association of disparate anomalies having apparently no relation to each other, since they involve at the same time several organs, several systems, and numerous tissues."

The book is of average size by medical standards, in large black type and replete with conveniently arranged illustrations and pedigrees, mostly from the author's personal experience. An extensive bibliography of related world literature, arranged systematically by subject, follows each chapter, and an equally comprehensive author index in the appendix testifies as to the care and devotion exercised in the preparation of this monumental accomplishment.

L. D. Abernethy, M.D.

Domestic Journals

Psychometric Evaluation and Factors Affecting the Performance of Children Who Have Recovered From Tuberculous Meningitis. Granville Nickerson and T. N. MacDermot: Pediatrics 27:-68 (Jan.) 1961.

Fifty-four children treated at the Alexandra Hospital in Montreal for tuberculous meningitis are discussed. Of these, 50 were followed subsequently with psychometric testing and were then evaluated as to factors which might or might not have influenced subsequent I.Q Of the 50 tested, five were high average; 10, average; 12, dull normal; seven, borderline normal; 16, mentally deficient in varying degrees.

The single factor seeming to have predictive value as to a possible unfavorable outcome was convulsive seizures during the acute disease. Loss of consciousness at some time during the early phase of the tuberculous meningitis did not appear to be a highly unfavorable sign; however, when associated with convulsive seizures, the intellectual functioning of the patient could, in most cases, be expected to be seriously impaired. An infant with tuberculous meningitis could be expected to have an unfavorable prognosis aside from other factors. An older child who had remained conscious throughout his illness and without convulsions could be expected to have a relatively good prognosis.

Adverse social factors, prolonged hospitalization and isolation, sensory motor sequela were also considered to influence an unfavorable outcome. In a few children, the intellectual function seemed to improve with time following recovery, but this was not universally the case.

MARGARET B. BATSON, M.D.

Books Received

JOURNAL MSMA has received the following books for review. Selections will be made for more extensive reviews in the interest of the readers and as space permits. Further information on the books listed will be furnished on request. Physicians are urged to submit reviews of additional books which, in their opinion, merit comment.

The Human Adrenal Gland. By Louis J. Soffer, M.D., attending physician and head of endocrinology, the Mount Sinai Hospital, New York City; clinical professor of medicine, State University of New York College of Medicine in New York City; Ralph I. Dorfman, Ph.D., director of laboratories, Worcester Foundation for Experimental Biology, Shrewsburg, Mass., research professor of biochemistry, Boston University Graduate School and professor of chemistry (affiliate), Clark University, and J. Lester Gabrilove, M.D., associate attending physician, the Mount Sinai Hospital, New York City, clinical associate professor of medicine, State University of New York College of Medicine in New York City. 591 pages with 74 illustrations. Philadelphia: Lea & Febiger, 1961. $18.50.

A Textbook for Midwives. By Margaret F. Myles. Cloth, 776 pages. Edinburgh and London: E. & S. Livingston, Ltd., 1961. (Baltimore: Williams & Wilkins Company, exclusive U. S. agents.) $8.50.

Current Therapy. Edited by Howard F. Conn, M.D., with 12 consulting editors. Cloth, 806 pages. Philadelphia: W. B. Saunders Company, 1961. $12.50.

Clinical Disturbances of Renal Function. By Abraham G. White, M.D., associate visiting physician and chief of the Renal Disease Clinic, Queens Hospital Center, Jamaica, N. Y. Cloth, 468 pages. Philadelphia: W. B. Saunders Company, 1961. $10.50.

Medical Pharmacology: Principles and Concepts. By Andres Goth, M.D., professor of pharmacology and chairman of the department, University of Texas Southwestern Medical School, Dallas, Texas. Cloth, 551 pages. St. Louis: The C. V. Mosby Company, 1961. $11.00.

A System of Medical Hypnosis. By Ainslie Meares, M.D., B. Agr. Sc., D.P.M., president, International Society for Clinical and Experimental Hypnosis. Cloth, 484 pages. Philadelphia: W. B. Saunders Company, 1960. $10.00.

Key and Conwell's Management of Fractures, Dislocations, and Sprains. 7th Edition. By H. Earle Conwell, M.D., associate professor of orthopedic surgery, University of Alabama School of Medicine, Birmingham, Ala., and Fred C. Reynolds, M.D., professor of orthopedic surgery, Washington University School of Medicine, St. Louis, Mo. 1153 pages with 1227 illustrations. St. Louis: The C. V. Mosby Company, 1961. $27.00.

A Manual of Cutaneous Medicine. By Donald M. Pillsbury, M.D., professor and chairman of the department of dermatology, University of Pennsylvania School of Medicine; Walter B. Shelley, M.D., Ph.D., professor of dermatology, University of Pennsylvania School of Medicine, and Albert M. Kligman, M.D., Ph.D., professor of dermatology, University of Pennsylvania School of Medicine. Cloth, 430 pages. Philadelphia: W. B. Saunders Company, 1961. $9.50.

A Traveler's Guide to Good Health. By Colter Rule, M.D. Paperback, 240 pages. Garden City, N. Y.: Doubleday & Company, Inc., 1960. $.95.

Health Education. 5th Edition. Edited by Bernice R. Moss, Ed.D., professor of health education, University of Utah; Warren H. Southworth, Dr. P.H., professor of health education, University of Wisconsin, and John Lester Reichart, M.D., Chicago, Ill., for the Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association. Cloth, 429 pages. Washington: National Education Association of the United States, 1961. $5.00.

Hospitals, Doctors, and Dollars. By Robert M. Cunningham Jr., editor, *The Modern Hospital.* Cloth, 268 pages. New York City: F. W. Dodge Corporation, 1961. $6.95.

Memoirs of a Medico. By E. Martinez Alonzo, M.D. Cloth, 335 pages. Garden City, N. Y.: Doubleday & Company, Inc., 1961. $4.50.

Keogh Program Needed to Correct Serious Tax Bias, Dr. Long Tells Senate Finance Committee

A mere handful of state and national organizations presented testimony on Keogh-type legislation, voluntary retirement plans for the self-employed, on July 25 when the Senate Committee on Finance conducted a one day hearing on the long-sought legislation. Dr. Lawrence W. Long, Jackson, association president, presented a statement urging enactment of the bipartisan measure.



MSMA program—waiting for enactment.

"The fundamental basis for our position," Dr. Long said, "is one of correcting, even to the limited extent of the present proposal, the serious tax inequities foreclosing the possibility of the self-employed creating their own voluntary retirement funds as opposed to those who may do so under the Internal Revenue Code of 1954." The statement made reference to the corporate employed who enjoy tax windfalls in company retirement and pension programs. Self-employed individuals, physicians, attorneys, other professional persons, and farmers, may make no such deductions for retirement savings under present laws.

Dr. Long's testimony summarized the association's policy position of 10 years standing. In it, he made three major points, each refuting previous Treasury Department charges against the Keogh program.

"Keogh-type legislation is anti-inflationary, conducive to personal industry and thrift, and a source of capital funds important to our expanding economy," the Mississippi president told Senator Byrd's committee. "A tax reduction across-the-board obviously places additional money in the hands of the work force, tending to create new sources of consumer expenditures with inflationary tendencies. A tax-deferment program containing Keogh-type restrictions diverts such monies away from consumer spending into controlled investment channels."

The second point of the testimony denied that the Keogh proposal was class legislation, a familiar charge. Dr. Long said that the opposition tactic ". . . is extremely unfortunate because it conceals the true objective of seeking to correct a patent inequity." He denied that the bill would benefit those in comfortable income brackets, pointing out that the proper comparison is that of "the successful self-employed with the successful corporate employed."

"Keogh-type legislation will not result in enormous Treasury revenue losses," Dr. Long asserted. Emphasizing that the entire proposal is one of tax-deferment and not tax-forgiveness, he backed the third point with experience in Canada and Great Britain where similar programs are already in effect.

Chief opponents to the measure at the hearings were representatives of the Treasury Department while proponents were primarily professional and farm organizations and the American Thrift Assembly, a composite group of national associations supporting the bill.

The present version of the plan would permit the self-employed to set aside 10 per cent of annual gross income or $2,500, whichever is the lesser, in a restricted retirement fund without current federal income tax liability. The Mississippi State Medical Association, in partnership with the Deposit Guaranty Bank, Jackson, has a ready-and-waiting program for members which would become effective upon enactment of the bill.

Discuss Peacetime Uses Of Nuclear Energy

Scientists, physicians, government officials, and businessmen of five states met Aug. 30-31 in Hot Springs, Ark. to discuss the peacetime uses of nuclear energy.

Dr. Elmer J. Harris represented MSMA at the seminar, which was a pilot effort to inform the public on peacetime uses of nuclear energy. The sponsors anticipate that other areas may hold similar meetings in the near future.

Of particular interest to physicians was a panel on nuclear medicine which considered teletherapy and internal treatments, radiation protection and radiobiology, and public health and radiation.

Panelists included Dr. Howard J. Barnhard, professor and chairman, department of radiology, University of Arkansas School of Medicine, Little Rock, Ark., Lt. Colonel David I. Livermore, Aerospace Medical Division of the Surgeon General's Office, Department of the Air Force, Washington, D. C., and Dr. Forrest Western, director, Office of Radiation Standards, Atomic Energy Commission.

Political notables appearing on the program included Governor E. F. Hollings of South Carolina and Governor Orval E. Faubus of Arkansas. Several scientists prominent on the national scene, including Dr. Wernher von Braun, also addressed the seminar.

Dr. A. D. Suttle Jr., director, the Mississippi Industrial and Technological Research Commission, moderated a panel on "Industry and Power."

The Southwest Nuclear Seminar was sponsored by the Regional Advisory Council on Nuclear Energy and the five states of Oklahoma, Texas, Mississippi, Louisiana, and Arkansas. Cooperating agencies included the U. S. Atomic Energy Committee, the Department of Defense, the National Aeronautics and Space Administration, and the Council of State Governments.

Thoracic Society Invites Submission of Abstracts

Mississippi physicians are invited to submit abstracts of papers relating to the general field of tuberculosis and other respiratory diseases to the American Thoracic Society.

From the papers submitted, a number will be chosen to be presented at the society's 57th Annual Meeting in Miami Beach, Fla., May 20-23, 1962. The Thoracic Society has planned its 1962 meeting in conjunction with the National Tuberculosis Association.

Abstracts must be in the hands of the program committee not later than Jan. 5, 1962. Eight copies are requested and each abstract should be limited to 300 words.

Further information may be obtained from Dr. Asher Marks, chairman of the Medical Sessions Committee, American Thoracic Society, 1790 Broadway, New York 19, N. Y.

Dr. Dabney Named Editor of Journal MSMA

Dr. William Moncure Dabney of Crystal Springs has been named editor of the JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION. The announcement was made by Dr. Lawrence W. Long, MSMA president, at the Aug. 17 Board of Trustees meeting.

Dr. Dabney succeeds Dr. Thomas J. Marland of Jackson, who resigned recently. The new editor has served as associate editor since his election in 1958 by the House of Delegates.



Dr. Dabney

In addition to his work with the JOURNAL, Dr. Dabney is president of the Tri-County Medical Society. He is engaged in the general practice of medicine in Crystal Springs.

Dr. George H. Martin of Vicksburg was named to complete Dr. Dabney's unexpired term as associate director.

Other members of the Committee on Publications, which includes the editors, are Dr. Dewitt W. Hamrick of Corinth, associate editor, Dr. Lawrence W. Long, of Jackson, committee chairman, Dr. B. B. O'Mara of Biloxi, and Dr. William E. Lotterhos of Jackson.

West Society Schedules Oct. 10 Meeting

The West Mississippi Medical Society will meet Tuesday, Oct. 10, according to Dr. Tom H. Mitchell, secretary. Dr. Mitchell said the meeting was scheduled for 7:00 p.m. at the Vicksburg Country Club.

Dr. Harwell Wilson, guest speaker for the evening, will discuss "The Acute Abdomen." Dr. Wilson is professor of surgery, University of Tennessee School of Medicine.

Dr. Wilson will give his paper at 7:00 p.m. This will be followed by a social hour and a dutch

dinner at $3 per person to be served following the social hour.

Dr. Mitchell extended an open invitation to all MSMA members to attend the West Society meeting. He said that dinner reservations should be made to him or to Dr. Tom B. Dominick. Both are with the Street Clinic in Vicksburg.

Council on Scientific Assembly Plans 94th Annual Session

The Council on Scientific Assembly laid down the groundwork for the 94th Annual Session at its July 20 meeting.

The 1962 Annual Session will be held May 10-12 in Jackson with headquarters at the Hotel Heidelberg. Headquarters for the Woman's Auxiliary will be the King Edward Hotel.

With all members present, the council unanimously adopted the following schedule for the Annual Session:

Tuesday,	May 10	Morning, House of Delegates
		Afternoon, Sections on Pediatrics and Medicine
Wednesday,	May 11	Morning, Symposium
		Afternoon, Sections on Surgery and EENT
Thursday,	May 12	Morning, Sections on General Practice, Obstetrics and Gynecology, and Preventive Medicine
		Afternoon, House of Delegates

The council, in other action, set the Tulane and Tennessee Alumni functions for Monday evening, May 7, 1962, and the Ole Miss Alumni function for Tuesday evening, May 8, 1962.

Rowland B. Kennedy, MSMA executive secretary, said that, as in previous years, the executive office of the association would help schedule meal occasions for specialty societies and other groups meeting concurrently with the 94th Annual Session.

Dr. C. G. Sutherland, chairman of the council, announced that the next meeting would be Jan. 11, 1962. He said section officers should plan to have their programs completed by that date. Deadline for material to be submitted for the hand program would be Feb. 15, 1962, he said.

Those present at the meeting in addition to Dr. Sutherland were Drs. William T. Wilkins of Clarksdale, chairman, Section on EENT; Percy T. Howell of Forest, chairman, Section on Preventive Medicine; Frank M. Wiygul of Jackson, chairman, Section on Pediatrics; Michael Newton of Jackson, chairman, Section on Obstetrics and Gynecology; John B. Howell Jr. of Canton, chairman, Section on General Practice; Raymond F. Grenfell of Jackson, chairman, Section on Medicine; James T. Thompson of Moss Point, chairman, Section on Surgery; Joe S. Covington of Meridian, secretary, Section on Medicine; Blanche Lockard of Jackson, secretary, Section on Obstetrics and Gynecology; W. E. Riecken of Kosciusko, secretary, Section on Preventive Medicine.

Others attending the meeting included Mrs. J. G. Egger of Drew, president, Woman's Auxiliary to MSMA; Dr. Lawrence W. Long of Jackson, president of MSMA; Dr. C. P. Crenshaw of Collins, president-elect; Rowland B. Kennedy of Jackson, executive secretary; Charles L. Mathews of Jackson, assistant executive secretary; Mrs. Margie Wilkins of Jackson, staff secretary.



Members of the Council on Scientific Assembly are shown at their July 20 meeting. From left to right are Drs. Crenshaw, Long, Thompson, Sutherland, Mrs. Egger, John B. Howell, Grenfell, Wilkins, Percy T. Howell, Covington, Wiygul, Newton, Lockard, and Riecken.

AMA's NY Parley Is 'Longest' Meeting



The AMA 110th Annual Meeting in New York City June 25-30 was definitely long on "Longs." Gathered outside the AMA House of Delegates in the Statler-Hilton ballroom are (left to right) Arkansas Alternate Delegate Dr. C. C. Long, Kentucky Delegate Dr. Robert C. Long, Louisiana Delegate Dr. Arthur D. Long, and Mississippi State Medical Association President Dr. Lawrence W. Long.

American Medical Education Foundation Sets '61 Plans

The nation's medical schools have faced the facts: the wider the gap between student tuition and actual cost, the closer the possibility of federal aid to medical education.

Medicine's answer to the dilemma is the American Medical Education Foundation. Begun in 1951 to help meet urgent financial needs faced by schools, the program has grown to a $1 million plus annual project supported mostly by doctors.

AMEF will conduct its 1961 campaign during the fall-winter months and urges doctors nationwide to support the program.

In Mississippi, a 16 member MSMA committee supervises the AMEF program under the chairmanship of Dr. W. E. Caldwell of Baldwyn. The committee is composed of one member from each component medical society. The 1961 members are Drs. Richard J. Field Jr., Centreville; Raymond F. Grenfell, Jackson; David M. Segrest, Port Gibson; G. Lacey Biles, Sumner; Archibald C. Hewes, Gulfport; Lyne S. Gamble, Greenville; Barry P. McIntosh, Hernando; A. C. Bryan Jr., Meridian; Bruce M. Kuehnle, Natchez; C. M. Murry Jr., Oxford; J. K. Avent Sr., Grenada; James M. Howell, Picayune; Willis Walker Jr., Hattiesburg; Jim C. Barnett, Brookhaven, and Edley H. Jones, Vicksburg.

During 1960 Mississippi physicians gave $5,659.85 to AMEF with 215 contributing. The University of Mississippi School of Medicine received $8,654.47 from the program, from which $5,207.32 represented general grants and $3,447.15 designated grants.

All funds received by the Foundation go to medical education—overhead and administrative expense are paid separately by AMA. Where gifts are "earmarked" for a particular school, the full amount of the contribution is sent in the donor's name. "Unearmarked" funds, comprising a majority of AMEF receipts, are distributed to accredited medical schools in three categories of grants: Class "A"—an equal amount to each of the four-year schools and a correspondingly lesser amount to the two-year institutions, Class "B"—an amount to each school based on enrollment, Class "C"—nonrecurring, one-time grants to meet special needs of applying institutions.

UMC Psychiatrist Addresses Pre-Retirement Planning Meet

Misuse of leisure time after middle life causes more unhappiness and illness than all the other physical handicaps of the aging process, a University Medical Center psychiatrist told retirement age state employees recently.

Dr. Roland E. Toms, associate professor of UMC's department of psychiatry, addressed one of five pre-retirement planning sessions attended by Mississippi Highway Department staff members who are nearing retirement. Dr. Toms told the group that the wisest investment of leisure time is creating something.

"One can find creative activity in painting, drawing, modeling, wood and metal work, music, gardening, writing, photography, in any of the many occupational therapy and trade projects, or in amateur social and civic welfare services," he said. "The only requirement is that the hobby be productive and satisfying," Dr. Toms advised.

Initiated by the Mississippi Council on Aging, the seminar series includes five two hour meetings. They are scheduled to be presented to a number

of different state departments, with the Highway Department being the first on the schedule.

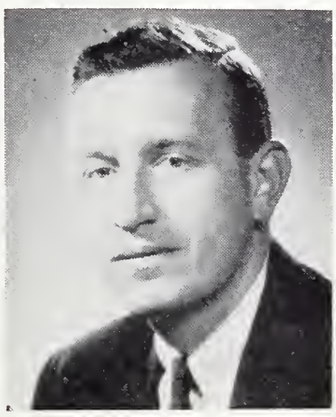
Program participants include physicians, bankers, insurance counselors, architects, social workers, employment consultants, dieticians, recreation directors, attorneys, and ministers. Object of the program is to prepare registrants for "gainful retirement" during senior years.

In his address, Dr. Toms concluded that "life should have more than length. It should have depth and width, productiveness and usefulness, and these are attained only by continuously directing our creative energies into productive channels."

McNerney Named President Of U.S. Blue Cross Association

Walter James McNerney, director of the bureau of hospital administration, school of business administration, University of Michigan, has been named president of the national Blue Cross Association.

Professor McNerney succeeds James E. Stuart, who became executive vice president of the association in 1959 and president in 1960 and is now chairman of the association's board of governors. The 25-man board consists of the chief salaried executives of 22 of the 79 autonomous Blue Cross Plans throughout the country and three representatives of the American Hospital Association.



Mr. McNerney

The youthful president (aged 36) directed the recently-completed three-year study of hospital and medical economics under a grant of $380,000 by the Kellogg Foundation to the University of Michigan. The study concentrates on four major areas: spending and utilization patterns of the population in health care, costs of providing health care, critical issues facing prepayment insurance and government, and the problems of control in the voluntary system.

The new president was graduated in 1947 with a Bachelor of Science degree in industrial administration at Yale University. He is a native of Hamden, Conn. Mr. McNerney received his masters in hospital administration at the University of Minnesota in 1950 and subsequently became administrative resident at Rhode Island Hospital in Providence.

In 1950 he joined the staff of the University of Pittsburgh and became administrator of one of the hospitals in the university's Medical Center. From 1953 to 1955 he was an assistant professor of hospital and medical administration in the graduate school of public health at the same university.

In 1955 he went to the University of Michigan to establish the hospital administration program there. When in 1958 the university formed the bureau of hospital administration in the school of business administration to formalize the university's hospital research and community service activities, Mr. McNerney was appointed director of the bureau.

Currently Mr. McNerney is chairman of the committee on research of the American Hospital Association's Council on Research and Education. He is also active on committees of the American College of Surgeons, the W. K. Kellogg Foundation, the American Medical Association, and the Michigan Hospital Association.

He is the author of numerous articles in professional journals on the hospital-community relationship, hospital economics, and the Blue Cross-hospital partnership. The "Study of Hospital and Medical Economics," resulting from the research he directed, will be published in two volumes this fall by the Educational Trust of the American Hospital Association.

Hinds County Voters Support Hospital Bond Issue

Jackson and Hinds County voters stamped approval on a bond issue for a new county hospital in Aug. 1 elections. In a field of 10 endorsed bond issues, the hospital proposal drew the most enthusiastic vote.

The $3,750,000 bond issue for the new institution was approved 10,008 to 2,559, or almost 4 to 1.

The Hinds County General Hospital, to be located in Southwest Jackson in the Raymond Road, Robinson Road intersection area, is tentatively scheduled to open some time in 1964. The 220 bed facility will be built without use of federal funds.

MSMA President Dr. Lawrence W. Long was one of the initial supporters of the hospital proposal.

Results of M.D. Physicals Announced by AMA

Results of the physical examinations given 1,900 physicians during the annual meeting of the American Medical Association in New York City last month were announced recently.

Electrocardiograms revealed heart abnormalities in 17.7 per cent of 1,945 physicians, according to Dr. Charles E. McArthur, Olympia, Wash., chairman of the AMA Committee on Annual Physical Examinations for Physicians.

Dr. McArthur said he was impressed with the consistency of the data during the seven years the M.D. physicals have been given at AMA annual meetings. Despite the fact that each year there is a different group of examinees and different consultants, the normal electrocardiograms have been close to 80 per cent each year, he said.

Chest x-rays of the 1,900 physicians showed:

—Suspected tuberculosis in 5.3 per cent.

—Other lung abnormalities in 6.1 per cent.

—Cardiovascular abnormalities in 6.7 per cent.

—Other conditions in 6.7 per cent.

AMA Clinical Meeting Set Nov. 26-30 at Denver

The 15th annual clinical meeting of the American Medical Association will be held Nov. 26-30 at Denver, with a program geared to basic problems of medicine faced by physicians in their practice.

An outstanding scientific program, with emphasis on new research developments, has been planned under the direction of Dr. Samuel P. Newman, Denver, chairman of the AMA's Council on Scientific Assembly.

Some highlights will include sessions and papers on such important areas of medicine as genes and chromosomes, electronics and computers in medicine, space medicine, medical aspects of American habits, new developments in virology, treatment of radiation injuries, new findings in chemotherapy for cancer, and latest data in the field of antibodies and antigens, Dr. Newman said.

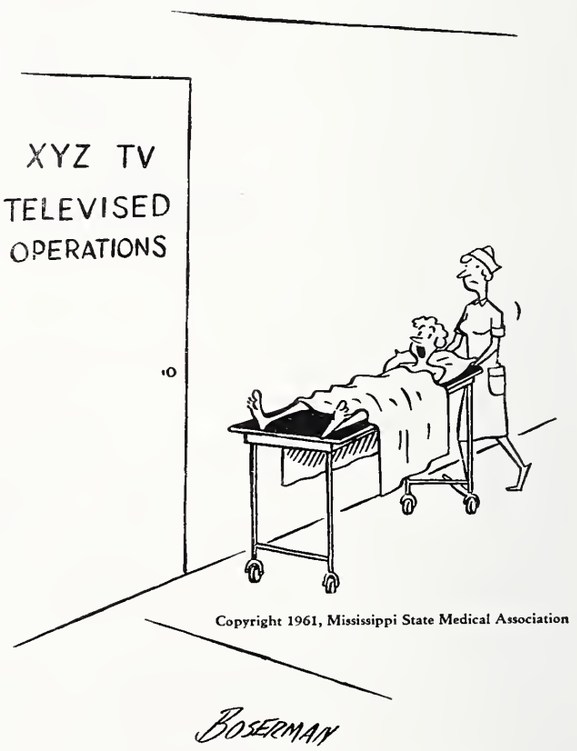
With more and more nuclear reactors coming into use all over the nation, many practicing physicians soon may begin to face the problem of treating injuries from radiation accidents, the chairman said.

A section of internationally known experts in the treatment of radiation injuries will offer three major papers in this important new area of medical care. The radiation experts will discuss such topics as "Potential and Probable Sources of Radiation Accidents," "Diagnosis and Pathology of Radiation Injury," and "Treatment and Prognosis of Radiation Injury." Participants will include researchers from Los Alamos and Oak Ridge, the Office of the Surgeon General, and the University of Chicago.

The age of advancing physical science also offers new findings to medical science: the use of electronics and computers in medicine. Chairman of this section at the Denver meeting will be Dr. A. H. Schwichtenberg, head of the department of aerospace medicine, Lovelace Foundation for Medical Education and Research, Albuquerque, N. Mex.

Computer systems for recording medical data to aid the physician in his diagnosis and prognosis will be discussed. Topics will include "The Future of Electronics in Medicine," "Microelectronics and New Concepts of Bioinstrumentation," "A System for Medical Data Recording," and "Biological Computers."

The virus, one of the most complex problems facing the clinician, will be the subject of a series of papers by outstanding specialists. Dr. Jonas E. Salk, Pittsburg, originator of the killed virus polio vaccine, will give a paper on "Immunization Against Virus Diseases." Other topics will in-



"I've always wanted to be an actress."

clude "The Nature of the Virus and Its Cellular Reaction," "Smallpox Vaccination Complications," "Virus Hepatitis," and "Identification of Viruses."

"We are confident that the 15th annual clinical meeting will offer one of the most interesting and informative programs ever presented at the winter session," Dr. Newman said.

"The program is designed to assist the physician in his practice. The latest findings in many areas of medicine will be presented by men who are top specialists in their fields. The meeting will be of great value to the clinician in advancing his knowledge."

Board of Health Revises Licensure of Foreign Graduates

The Mississippi State Board of Health has revised its regulations concerning licensure of physicians who are graduates of foreign medical schools.

The change requires full citizenship rather than acceptance on the basis of declaration of intention to become an American citizen.

Before being considered for licensure in Mississippi, all graduates of foreign medical schools will be required to:

1. hold a permanent certificate of the Educational Council for Foreign Medical Graduates, 1710 Orrington Ave., Evanston, Ill.
2. be an American or Canadian citizen.
3. pass a written examination, as Mississippi does not reciprocate with any state when the applicant is a graduate of a foreign medical school.
4. appear before the members of the board for an interview prior to examination.

The revision was passed at the State Board of Health's June 21 meeting.

Congenital Defects Center Established at UMC

The 82 Mississippi chapters of the National Foundation in cooperation with the University Medical Center have set up a new medical project designed to deal with childhood crippling conditions resulting from congenital defects.

In a joint effort, the chapters have contributed $26,000 in March of Dimes funds in a grant that will enable medical specialists working as a team to provide top treatment for these patients.

Dr. Robert Q. Marston, director of the University Medical Center thanked the chapters. "Your support is gratefully accepted," he said. "The grant will allow the University Medical Center to improve its diagnostic and treatment facilities to patients with congenital defects. The achievement of comprehensive and exemplary patient care will provide appropriate models without which our teaching efforts become limited."

Details of the project, an advanced concept in patient aid for victims of crippling diseases, were announced by Dr. A. L. Gray, state health officer and state March of Dimes chairman.

As spokesman for the project, Dr. Gray explained that the grant will help finance certain staff salaries, including a clinical director, medical social worker, physical therapy personnel, and some equipment.

The Special Birth Defects Treatment Center will serve outpatients in the general pediatric clinic. Patients may be admitted on referral by a physician.

The special facility is to have the services of doctors, nurses, physical therapists, and medical social workers. The "team approach," pioneered by the National Foundation in its polio centers, was explained this way by Dr. Gray:

"The team method in treating chronic and crippling disease conditions like congenital defects offers special advantages. Together the team members bring to the treatment problem a variety of skills and a store of new knowledge no individual medical specialists can be expected to possess.

"It is one answer to the long-range care program an increasing number of disabled children require. It employs new medical techniques and rapidly expanding developments, and provides services that give parents and the community a greater understanding of the special problems involved in caring for children disabled by congenital defects."

Dr. Noel C. Womack Jr., Jackson, chairman of the Medical Advisory Committee of the Hinds County Chapter of the National Foundation, called attention to the need for expanded services to children. "As the first two Mississippi Conferences on Handicapped Children (1959-1961) clearly brought out, the needs of Mississippi children with congenital defects are much greater than can be cared for by the available facilities and personnel," Dr. Womack said. "This Special Treatment Center will attempt to help close this gap."

The National Foundation's expanded program includes aid to patients with paralytic poliomyelitis, congenital defects, and rheumatoid arthritis. Direct patient aid for the latter two groups is limited to those under 19 years of age.

State Morbidity Reported Through July 28

The Mississippi State Board of Health reports the following occurrence of morbidity for 1961 through the 30th week of the year, ending July 28. Case totals reported are shown opposite the disease condition.

Tuberculosis, pul.	433
Tuberculosis, O.F.	29
Gas gangrene	2
Salmonella infection	5
Brucellosis	5
Dysentery	
Amebic	22
Bacillary	22
Septicemia, NOS	1
Staphylococcus infection	10
Leptospirosis	1
Diphtheria	5
Typhoid fever	1
Meningococcus infection	
Meningitis	9
Meningococcemia	4
Meningitis, O.F.	60
Tularemia	9
Tetanus	5
Poliomyelitis (P)	4
Encephalitis	
Infectious	23
Postvaccinal	1
Mononucleosis, infectious	66
Generalized vaccinia	1
Toxoplasmosis	3
Puerperal sepsis	2
Diarrhea of newborn	12
Hepatitis, infectious	921
Helminthic infection	
Hookworm	830
Ascariasis	195
Strongyloides	20
Histoplasmosis	23
Streptococcus infection	
Scarlet fever	148
Strep throat	1,313
Rheumatic fever	3
Rheumatic heart	3
Pertussis	29
Measles	1,240
Chickenpox	752
Mumps	591
Influenza	498
Chancroid	16
Gonorrhea	3,671
Syphilis	
Early	172
Late	161

Civil Defense Staff College Holds Seminar in Jackson

A week-long presentation of current civil defense activities was held in Jackson July 23-28.

Presented by the Staff College of the Office of Civil and Defense Mobilization, the program attracted approximately 100 Mississippians.

Members of the Staff College discussed topics ranging from areas of world conflict through radiological defense to personal responses to disaster.

The Mississippi State Civil Defense Council was responsible for local arrangements. The Staff College travels to one state a year to present its series of lectures. Its home base is Battle Creek, Mich.

175 Attend First Session Of Alcohol Studies School

Approximately 175 persons from six Southeastern states studied the problem of alcohol in modern society during a week's seminar at Millsaps College.

The first Southeastern School of Alcohol Studies and a Vocational Rehabilitation Institute on "Rehabilitation Counseling of the Alcoholic" met jointly August 6-11.

Two physicians served as principal speakers for the meeting. Dr. C. Brook Henderson told the group that some people apparently become alcoholics in an attempt to prove they can excell in something—even if it is only in outdrinking everybody else.

Dr. Henderson is clinical director of the Florida Alcoholic Rehabilitation Program in Avon Park, Fla.

Speaking on "Psychological Implications of Drinking," Dr. Henderson said that the "motivation of mastery" seems to cause some persons to become alcoholics. "There seems to be a constant attempt to master the substance that always defeats them—alcohol," he said.

Dr. Henderson also said his studies showed that the phenomenon of alcoholism "running" in families was due more to environmental than hereditary factors.

Another physician, Dr. Vernelle Fox, medical director of the Georgian Clinic and Rehabilitation Center for Alcoholics in Atlanta, Ga., spoke on "Medical Management of the Alcoholic."

"Physicians and others working with the alcoholic must learn to look on alcoholism as a chronic, rather than an acute, disorder," she told the group.

Physicians, social workers, and ministers often become discouraged and frustrated in working with the alcoholic because of the long period required for recovery, Dr. Fox said.

The average alcoholic who recovers from the disorder requires two to three years, she said.

"During the first year of recovery, the average alcoholic does well if he manages to quit drinking," Dr. Fox pointed out. "During the second year, he will get his material life straightened out and during the third year, he will straighten out his interpersonal relationships."

Twenty-nine speakers appeared before the school, an expansion of the former Mississippi Summer School of Alcohol Studies. Registrants from eight states and Puerto Rico attended.

The Office of Vocational Rehabilitation, U. S. Department of Health, Education, and Welfare, recognizing alcoholism as a disabling disorder, financed the institute for 25 vocational rehabilitation counselors from the six southeastern states.

The Southeastern School of Alcohol Studies was sponsored by a number of alcohol education groups including the Mississippi State Department of Education.

State Doctors Invited to Attend Medical Progress Assembly

Physicians from Southern states are invited to attend the Fourth Annual Medical Progress Assembly in Birmingham, Ala., Sept. 17-19 at which 17 authorities will lecture on subjects ranging from allergy to urology.

The Assembly will be presented by the Birmingham Academy of Medicine, comprised of 160 younger specialists, and will feature a broad spectrum of subjects helpful to those in the major specialties as well as to general practitioners. The Assembly has been accepted for 14 hours of Category I credit by the American Academy of General Practice. Last year's Assembly attracted 741 from Southern states.

A Mississippi physician, Dr. John R. Snavely of the University of Mississippi School of Medicine, will serve as one of the speakers for the Assembly. Dr. Snavely will discuss "The Management of Severe Hepatitis and the Complications of Cirrhosis."

Special entertainment events have been planned for both physicians and their wives. These include a Sunday reception-buffet, a banquet and dance Monday and for the wives, luncheons, tours, and other events. Door prizes will be awarded and refreshments will be served during breaks for viewing the technical exhibits. Headquarters for the meeting will be at the Dinkler-Tutwiler Hotel.

Arthritis and Rheumatism Group Sets Sept. Conference

The Mississippi Chapter of the Arthritis and Rheumatism Foundation will hold its annual conference in the King Edward Hotel, Jackson, on Thursday, Sept. 21.

Both scientific and lay sessions are scheduled for the one-day meeting.

Dr. R. W. Lamont-Havers of New York will be the featured speaker for the 2:00 p.m. program for physicians, planned by the medical and scientific committee. Dr. A. Gayden Ward of Jackson is committee chairman.

The national medical director for the Arthritis and Rheumatism Foundation, Dr. Lamont-Havers will discuss uses and abuses of steroids and hope and the treatment for arthritics.

Dr. Lamont-Havers has held his position with the foundation since 1958 after having served as associate medical director for three years and having been medical director of the British Columbia Division.

The scientific members will hear committee reports by Dr. S. H. McDonnieal of Jackson, on quackery; Dr. George S. Barnes of Columbus, legislative; Dr. Frederic C. McDuffie of Jackson, education, and Dr. Laurance J. Clark of Vicksburg, nominating.

A service committee is to be named for the first time. According to chapter officials, the Mississippi organization accepts patient service as its primary aim.

The conference for lay members will get under way at 8:30 a.m. in the King Edward Hotel with Mrs. Elizabeth Wates in the chair.

Dr. Lamont-Havers will be the principal speaker at a 12:30 p.m. luncheon when Dr. Lawrence W. Long will bring greetings from the Mississippi State Medical Association.

Speakers for the afternoon lay program include W. W. Fulton, field director for the Mississippi chapter; Heber Ladner, state campaign chairman,

and Neal Cirlot, publicity chairman. All are from Jackson.

The guest speaker for the annual meeting is the author of numerous published articles dealing with rheumatic disease. He is an instructor in medicine at Columbia University and assistant physician to Presbyterian Hospital. Dr. Lamont-Havers received his B.A. degree from the University of British Columbia in 1942 and his M.D. from the University of Toronto. He interned in Vancouver General Hospital and took additional training at Queen Mary's Hospital in Montreal and at the College of Physicians and Surgeons at Columbia.

Organized in April, 1960, the Mississippi Chapter, Arthritis and Rheumatism Foundation has adopted the national five-point program of action through research, diagnosis and treatment, rehabilitation, professional training and education, and mobilizing public interest and support.

The members of the medical and scientific committee are Dr. Ward, chairman; Dr. McDuffie, vice-chairman; Dr. Edward A. Attix of Hattiesburg, secretary; Dr. J. R. Snavely, Dr. Lawrence Long, Dr. Durward L. Blakey, J. T. Gilbert and Jack Lane, all of Jackson; Dr. Barnes, Dr. John I. Davis of Natchez, Dr. Clark, Dr. Joseph Price of Meridian, Dr. John Archer of Greenville, Dr. Charles T. Berry of Greenville, and Dr. Thomas L. Moore Jr. of McComb.

NEW MEMBERS

The following physicians have been elected to membership by their respective component medical societies in the Mississippi State Medical Association and the American Medical Association:

SWARTZFAGER, JAMES HARRISON, Tupelo. Born Ridgway, Pa., Sept. 29, 1907; M.D., University of Tennessee College of Medicine, Memphis, 1940; interned U. S. Marine Hospital, Baltimore, Md.; elected June 13, 1961, by Northeast Mississippi Medical Society.

TURNAGE, JOHN NEIL, Aberdeen. Born New Hebron, Miss., May 17, 1926; M.D., University of Tennessee College of Medicine, Memphis, 1956; interned Methodist Hospital, Memphis, Tenn.; member American Academy of General Practice; U. S. Navy, two years; elected June 13, 1961, Northeast Mississippi Medical Society.

DEATHS

BEAN, VICTOR HUGO, Meridian. M.D., Memphis Hospital Medical College, Tenn., 1912; House Physician, Stetson Hospital, Philadelphia, Pa., 1920-1921; member of American Psychiatric Association; died June 29, 1961, aged 75.

HIGHTOWER, CHARLES COUNCE, JR., Hattiesburg. M.D., Harvard Medical School, Boston, Mass., 1944; interned Touro Infirmary, New Orleans, La., two months; interned Breckenridge Hospital, Austin, Texas, nine months; member American Medical Association and Hattiesburg Clinical Society; died July 17, 1961, aged 41.

SHIPP, VIRGIL ELLIS, Port Gibson. M.D., Meharry Medical College, Nashville, Tenn., 1925; died May 2, 1961, aged 89.

AUXILIARY

Transactions of The 38th Annual Session

The Woman's Auxiliary to the Mississippi State Medical Association held its preconvention board meeting at 4:30 p.m. on May 8, 1961, in the Hurricane Room D in the Buena Vista Hotel in Biloxi.

Mrs. Lee R. Reid, president, called the meeting to order, and Mrs. John G. Egger, president-elect, gave the invocation. The president welcomed Mrs. Aaron E. Margulis, Santa Fe, N. Mex., director of the Woman's Auxiliary to the American Medical Association.

Mrs. Wendell Holmes, secretary, read the minutes from the last board meeting held on Feb. 1, 1961. The minutes were approved as read.

The treasurer, Mrs. J. D. Simmons, gave her yearly report stating that there was a balance of $2,724.25 in the treasury.

Mrs. H. H. McClanahan, legislative chairman, reported that 1,900 copies of *News and Views* had been sent out—one copy to each doctor's wife in the state. She also stated that 1,350 cards had been mailed to MSMA members. She reported that there are 1,261 MSMA members and 790 auxiliary members.

Mrs. McClanahan also reported on Operation Coffee Cup. She asked all members to invite friends into their homes to hear the record "Ronald Reagan Speaks Out Against Socialized Medicine."

Mrs. Reid gave the report on the Nurse Loan Fund in the absence of the chairman, Mrs. John R. Bise. Mrs. Reid stated that Billie Jean Freeman of Shawnee, Okla., was now paying back $10 per month on her loan of $175.

Budget Chairman Mrs. Augustus Street presented the proposed budget for the year 1961-62 concluding with a motion that the budget be accepted. The motion was seconded by Mrs. A. E. Brown, voted, and carried.

Mrs. A. E. Brown, AMEF chairman, reported that contributions to that point had reached $527.56. She described her plans for the convention campaign for further contributions. Mrs. Brown recommended that the Auxiliary donate $100 to AMEF, earmarking the money for the University of Mississippi School of Medicine. Motion was seconded by Mrs. J. H. Gaddy and carried.

Mrs. A. T. Tatum reported that $306.04 had been sent to Miss Effie Clark, director of the Preventorium. She stated that the balance in the Preventorium savings fund was $5,000.

Mrs. J. P. Culpepper, councilor, seventh district, reported the organization of a new unit in Columbia.

Mrs. M. S. Riddell, revisions chairman, recommended that the by-laws as amended and approved by the board and local auxiliaries be adopted.



"Get up and help me straighten the house. The doctor will be here in five minutes."

Mrs. Reid reported that the winners of the AAPS essay contest were Tom Morris of Clarksdale, first place; Robert G. White of Gulfport, second place, and Susan West of Gulfport, third place. She also reported that Robert White won first place in the national contest.

The motion to adjourn was made by Mrs. Augustus Street, second Mrs. S. Lamar Bailey, and carried.

GENERAL SESSION

Mrs. Lee R. Reid, president, presided at the general session of the Woman's Auxiliary to the Mississippi State Medical Association held in the Sun Room of the Buena Vista Hotel in Biloxi on May 9, 1961. Immediately preceding the session, Mrs. Reid entertained auxiliary members and guests with a continental breakfast.

The invocation was given by Mrs. J. P. Culpepper Jr. of Hattiesburg. Mrs. H. H. McClanahan of Columbus led the members in the auxiliary pledge.

Mrs. James T. Thompson of Moss Point welcomed the auxiliary members and guests to the Gulf Coast. The response was given by Mrs. M. S. Riddell of Winona.

Mrs. Reid presented Mrs. John Egger of Drew, president for 1961-62, to the general session. Mrs. Aaron E. Margulis, Santa Fe, N. Mex., director of the Woman's Auxiliary to the AMA and Mrs. Roy Douglass, Huntingdon, Tenn., president-elect, Woman's Auxiliary to the Southern Medical Association, were introduced.

Greetings were brought to the Mississippi State Medical Association Auxiliary from the Southern Medical Association Auxiliary by Mrs. Douglass. She commented on the requirements and benefits of membership in the SMA Auxiliary. She announced that the Southern meeting would be held in Dallas, Texas, Nov. 6-9, 1961.

Mrs. Eldon L. Bolton of Biloxi, was introduced as convention chairman, and she introduced the following members of her committee: Mrs. James T. Thompson, Mrs. P. E. Werlein, Mrs. Karl Horn, Mrs. Robert Mitchell, Mrs. John Spriggs, Mrs. Eugene Trudeau, and Mrs. M. B. Snelling.

A report on the American Medical Association Auxiliary meeting in Miami, Fla., in June 1960 was given by Mrs. James T. Thompson.

Mrs. H. C. Ricks Sr., Jackson, presented a memorial service honoring the following deceased members: Mrs. Bernard Hess Booth, Drew; Mrs. James T. Doster Jr., Columbus; Mrs. Richard H. Fenstermacher, Vicksburg; Mrs. E. K. Guinn,

Okolona; Mrs. Billy S. Guyton, Oxford; Mrs. W. C. Hays, Sherman; Mrs. L. R. Hudson, Hattiesburg; Mrs. Guy C. Jarratt, Vicksburg; Mrs. Wesley W. Lake, Pass Christian; R. C. Lowry, Boyle; Mrs. Oscar Eugene Singold, Cleveland, and Mrs. F. Michael Smith, Vicksburg.

The roll was called with 59 members present. Mrs. John B. Howell Jr. made a motion to suspend the reading of the minutes of the last general session. Mrs. S. Lamar Bailey seconded the motion and it was carried.

The recommendation of the Executive Board that the by-laws as amended and approved by the board and the local auxiliaries be adopted was read by the secretary. The recommendation was accepted on motion by Mrs. M. S. Riddell and second by Mrs. Augustus Street.

The secretary read the recommendation of the board that $100, earmarked for the University of Mississippi School of Medicine, be donated by the Woman's Auxiliary to the Mississippi State Medical Association to the American Medical Foundation. Motion was made by Mrs. A. E. Brown, second Mrs. George Owens, and carried.

Mrs. Reid gave the president's report of the year's accomplishments.

The following distinguished guests from MSMA were recognized: Dr. G. Swink Hicks, president; Dr. Lawrence W. Long, president-elect; Dr. Augustus Street, auxiliary advisory chairman for 1961-62, and Dr. George E. Twente, auxiliary advisory chairman for 1960-61.

Mrs. J. D. Simmons, treasurer, gave the following report. Balance May 1960, was $728.83. Total Balance May 9, 1961, was $2,724.25. The treasurer's report was adopted as read.

Mrs. Augustus Street, chairman of the budget committee, presented the proposed budget for the year and moved that it be accepted. Motion voted and carried.

BUDGET 1961-62

Balance brought forward	$1,200.00
10% contingent fund	120.00
President	400.00
President-elect	200.00
Yearbooks (Including postage)	320.00
Stationery	40.00
Newsletters	10.00
Miss. Women's Cabinet dues	5.00
Organization Chairman	10.00
Nominating Committee Chairman	10.00
Treasurer	10.00
Postage for Officers and Chairmen	32.00
President's Pin (Past)	28.00
	$1,185.00

Mrs. James T. Thompson, chairman of the nominating committee, made the following report: president, Mrs. John Egger, Drew; president-elect, Mrs. A. T. Tatum, Hattiesburg; treasurer, Mrs. T. J. Safley, Jackson; corresponding secretary, Mrs. Bryan A. Mayo, Drew; recording secretary, Mrs. Wendell B. Holmes, McComb; first vice president, Mrs. Lee R. Reid, Jackson; second vice president, Mrs. W. W. Crowson, Clarksdale; third vice president, Mrs. Guy T. Vise, Meridian; fourth vice president, Mrs. H. H. McClanahan Jr., Columbus; parliamentarian, Mrs. S. Lamar Bailey, Koscuisko; historian, Mrs. T. A. Baines, Jackson.

Mrs. A. E. Brown moved the nominating committee's selection of officers for 1961-62 be accepted. Mrs. G. Swink Hicks seconded. Motion was carried.

Mrs. T. J. Safley asked for a rising vote of thanks for the 1960-61 officers.

The president, Mrs. Reid, appointed the following as delegates to the AMA convention in New York in June: Mrs. T. A. Baines, Jackson; Mrs. Raymond Grenfell, Jackson; Mrs. Lawrence Long, Jackson, and Mrs. John Egger, Drew. Alternates appointed were Mrs. J. P. Culpepper, Hattiesburg; Mrs. Howard Nelson, Greenwood, and Mrs. John Lucas, Greenwood.

Courtesy resolutions were read by Mrs. A. T. Tatum, and the meeting was adjourned on motion by Mrs. John B. Howell and second by Mrs. H. C. Ricks Sr.

LUNCHEON MEETING

A luncheon honoring Mrs. Aaron E. Margulis of Santa Fe, N. Mex., director of the Woman's Auxiliary to the American Medical Association, and Mrs. Roy A. Douglass of Huntingdon, Tenn., president-elect of the Woman's Auxiliary to the Southern Medical Association, was held May 9, 1961, in the Lotus Room at the Buena Vista Hotel, Biloxi. Mrs. Lee R. Reid, president, Woman's Auxiliary to MSMA, presided.

In a short talk, Mrs. Margulis compared the life of Mrs. Oliver Wendell Holmes to the role of the present day doctor's wife. At the conclusion of her address, Mrs. Margulis installed the officers for 1961-62. She reminded each officer of her personal responsibility to her elected office and to the Auxiliary.

The gavel and pin were presented by Mrs. Reid to her successor, Mrs. John Egger, who accepted with a response. Mrs. Augustus Street presented the past president's pin to Mrs. Reid.

Dr. George E. Twente discussed the Auxiliary's part in the fight against socialized medicine.

Mrs. A. E. Brown, AMEF chairman, delivered certificates of achievement to auxiliaries making

outstanding records in support of this fund. Lowndes County took first place, Sunflower County, second place, and Humphreys County, third place.

POSTCONVENTION BOARD MEETING

The Woman's Auxiliary of the Mississippi State Medical Association held its postconvention board meeting May 9, 1961, at 3:30 p.m. in the Sky Lounge of the Buena Vista. The meeting was called to order by Mrs. John Egger, president.

The roll was called with 26 members present. Mrs. Egger announced that board meetings for 1961-62 would be held Aug. 30, 1961, and Jan. 31, 1962, at the Mississippi State Medical Association headquarters building in Jackson.

Mrs. S. Lamar Bailey suggested the president ask each auxiliary member to donate $1.00 to AMEF next year.

Mrs. Egger welcomed Mrs. Aaron E. Margulis to the meeting and expressed the auxiliary's appreciation for her part in the annual session.

Mrs. G. Swink Hicks thanked everyone for courtesies extended her throughout the year as she traveled with Dr. Hicks in his capacity as MSMA president.

Mrs. George Twente moved to adjourn, second by Mrs. S. Lamar Bailey, and carried.

PAST PRESIDENTS' BREAKFAST

Mrs. James T. Thompson was hostess at the past presidents' breakfast May 10, 1961, in the Lotus Room of the Buena Vista. Flowers for the occasion were provided by Mrs. John B. Howell Sr. of Canton, a former president who graciously makes this contribution annually.

Auxiliary President's Report On 1960-61 Activities

This is the 38th year of an Auxiliary to the Mississippi State Medical Association, and it is with pride I report on the year's work and progress.

We have been following the national theme, "The Heritage of American Medicine," by closely adhering to the programs recommended by the national organization. A greater interest in the American Medical Education Foundation has resulted in more contributions. County units have participated in its support through donations from memorial card and Christmas card sales. The third largest contribution came from individuals. An AMEF project was used at the convention. Our contribution amounted to $689.53 this year. AMEF literature has been sent to all state and county chairmen.

The Woman's Auxiliary has enjoyed fully the cooperation of the Mississippi State Medical Association. Your president has worked closely with Dr. G. Swink Hicks, association president, and executive secretary, Rowland Kennedy, appearing before numerous societies bringing greetings. Your president appeared before the House of Delegates and presented other state officers and also submitted a written report. The advisory committee has been most helpful in giving counsel and guidance. MSMA gives financial assistance to the Woman's Auxiliary whenever necessary and each year contributes to convention expenses. The association president, president-elect, and chairman of the advisory committee appear before the Auxiliary during the convention general session.

The programs have been many and varied. Your president used material from the national association especially on membership, AMEF, and legislation in her message to county units. She also spoke of the importance of each member supporting and participating in community projects and asked for reports on services given by each county unit. One unit had members assisting in the Red Cross bloodmobile. One manned the mobile x-ray bus. Some of the units made donations to a loan closet for the purchase of wheel chairs, beds, and other sick room equipment. One auxiliary made and donated 105 gowns to be used by a cancer loan closet. One unit bought and manned a book cart for a local hospital and supplied uniforms for the workers. Gifts and visits were made to two cerebral palsy schools and veterans hospitals. Individual members have assisted with the cancer drive, heart fund, polio, Easter seal, welfare service, and appeared on TV for the tuberculosis Christmas seal drive. Some worked voluntarily at speech centers, crippled children clinics, and cerebral centers. Others served as leaders in Scouts, PTA, and all community and civic groups. The number of hours given by our members to community service was approximately 51,217.

Your president and the state legislative chairman have helped to keep all auxiliary members informed on legislation and have worked closely with the medical association. Our members are interested in legislation and some county units have sent letters and telegrams to their congressmen. Several units have had programs on legislation with the speaker being Dr. George E. Twente, one of our advisors, and a member of the AMA Legislative Council. We were also fortunate to have him speak to our board meeting and convention luncheon.

ORGANIZATION / Continued

We have put out a state yearbook, three newsletters, and a guide for auxiliary presidents. Space was also given in the JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION for auxiliary news. Our records have been kept up to date and filed annually by the state historian. Minutes of previous years are stored at the association building.

Four board meetings were held, one with a conference similar to the state presidents' conference. We had an excellent attendance at all meetings.

The revisions committee met, studied, and revised our constitution. Copies of it were then sent to all auxiliaries and the changes were approved.

Mississippi has 22 auxiliary units. I have been able to visit all but a few through joint and individual meetings. The Columbia Unit of the South Mississippi Medical Auxiliary has been organized with nine members. They will meet monthly and once a year will meet with the Hattiesburg and Laurel Units of the South Mississippi Auxiliary. Membership has been stressed and some units have made personal contacts, sent invitations, and had teas and coffees honoring new members.

Recruitment and scholarships are stressed in our auxiliaries. Each auxiliary has participated either in having its own loan fund or contributing to the state nurses loan fund. Two nurses were admitted into the Gilfoy School for Nurses sponsored by the state loan fund. Several loans have been repaid, and we will soon have enough to offer another loan. One auxiliary had a benefit bridge for a local scholarship fund. Seven auxiliaries have their own local fund.

Four new Future Nurses Clubs have been organized and plans for organizing several this fall have been worked out. Approximately 18 nurses have been recruited from membership in these clubs.

We have worked closely with the MSMA Council on Medical Services on civil defense. One auxiliary contributed 33 members, who worked at least 670 hours in a local emergency during a flood. They worked as teams at the clothing center and at other activities.

Home safety, water safety, and accident prevention was stressed this year. Films and speakers from the Highway Patrol were used in many programs. Summer swimming classes and driver training courses were sponsored and one unit worked with senior citizen safety.

The observance of Doctor's Day and the use of the traditional red carnation continues to spread throughout the state. This year 16 counties used this day to honor doctors through dinner dances, coffees, afternoon teas, and banquets. One auxiliary used the theme "A Hundred Years in Medicine."

I am proud of every Mississippi auxiliary member who tried in her own way to further the aims and objects of our organization, to serve as a liaison between the profession and the public, to help better public relations as she went about her every day life as a mother and housewife, to work toward better health and the welfare of her community.

In our work we have an opportunity to help our husbands in ways no one else can. It must always be remembered in any summary of our activities that the basic object of our organization is social rather than business or professional. It was first created so that wives of physicians might become acquainted and learn to know and love each other, and share their problems, joys, and sorrows. The work we do is the natural product of our social contacts with each other. This important over-all object we sometimes take for granted. This should not be so, because without learning to love one another, the work we do will soon begin to wither away.

MRS. LEE R. REID
JACKSON



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"You're lucky we could even put you back together again, Mr. Dumpty."

JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION
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ORIGINAL PAPERS

Diagnostic Variations and Treatment in Rheumatoid Arthritis

THOMAS E. WEISS, M.D.
New Orleans, Louisiana

The exact incidence of rheumatoid arthritis is unknown, but available population surveys indicate that 2 to 7 per cent of the adult population in some parts of the world may be affected. Any age group is vulnerable; victims ranging from 2 years to 90 years have been reported. Many organizations have been formed to help those afflicted with rheumatoid arthritis. One of the most active in Mississippi, the state chapter of the Arthritis and Rheumatism Foundation, just held its annual convention in Jackson on Sept. 21. In this paper, Dr. Weiss discusses diagnostic variation in rheumatoid arthritis and considers treatment methods.

THE DIAGNOSIS and management of many cases of rheumatoid arthritis continue to challenge the attending physician. Classical rheumatoid arthritis is readily recognized, but its onset and early course may cause confusion. The various forms of collagen disease have many common features, and because treatment and prognosis may differ, sharper diagnostic acumen is needed for differentiation.

DIAGNOSIS

Variations in the early clinical theme of rheumatoid arthritis make it difficult to identify a paradigm that would always offer a satisfactory basis for diagnosis. The most typical features of the disease are slowly progressive, bilateral, symmetrical polyarthritis with fusiform swelling of soft tissue, associated with subcutaneous rheumatoid nodules, positive result of the serologic tests for rheumatoid arthritis, and stiffness, general fatigue, and lassitude most evident in the morning. Exacerbations and remissions, with gradual loss of some articular function, form the longitudinal pattern of activity.

In about 60 per cent of patients the onset is preceded by anorexia, fatigue, loss of weight, tachycardia, vague paresthesia-like symptoms of the extremities, sweats, muscle stiffness, and sometimes mild anemia and elevated erythrocytic sedimentation rate. Articular symptoms may not appear for weeks or months. The onset in acute, fulminating cases is usually sudden, manifested by

From the Department of Internal Medicine, Ochsner Clinic and Tulane University School of Medicine.
Read before the Section on Medicine, 93rd Annual Session, Mississippi State Medical Association, Biloxi, May 9-11, 1961.

sustained or spiking fever, profuse sweating, severe prostration, rash, and leukocytosis.

Usually the febrile course and the redness, tenderness and swelling in one or more joints suggest a bacterial infection and result in treatment with antibiotics. Occasionally, fever is the predominant symptom; the joints may not be noticeably swollen, and only by careful examination will active synovitis be detected. Fever, rash, and arthralgia are frequently the presenting complaints in juvenile rheumatoid arthritis. The history of early rheumatoid arthritis often includes trauma to a joint, and, if the complaint remains monarticular, traumatic arthritis is often considered. Subsequently, other joints become symptomatic, systemic changes develop, and the role of trauma then becomes insignificant in the light of the entire picture.

In rheumatoid arthritis the peripheral joints (hands, wrists, and ankles) are affected twice as often as the proximal joints (knees, hips, elbows, and shoulders). About one of 10 patients has spinal involvement initially. Often, in the first stages of rheumatoid arthritis the feet, knees or shoulders may be involved as isolated joints, the patient has no systemic symptoms, and no abnormal roentgenographic or laboratory evidence of disease. A painful, stiff shoulder of early rheumatoid arthritis may appear to be localized, nonspecific bursitis, and because the initial articular symptoms last only several days, treatment is thought to be effective, only to be followed by development of the same difficulty in the opposite shoulder a few weeks later. Such bilateral symmetrical involvement is suggestive of rheumatoid arthritis. Sore, aching feet, resulting in the purchase of many pairs of shoes (usually by women) suggests thickening of the metatarsal joints, which is often due to early rheumatoid arthritis. The changes in the foot affected by rheumatoid arthritis give the patient time to purchase new shoes, whereas the effects of gout are so acute that the patient will cut his shoes or use slippers.

The hands of the rheumatoid arthritic patient may provide helpful diagnostic clues. Erythema of the palms is common. Nodules can be found in the flexor tendons of the fingers. About 5 per cent of patients have trigger fingers, usually the second and third fingers of women with severe disease. The carpal tunnel syndrome caused by compression of the median nerve beneath the volar carpal ligament, due to tenosynovitis, may be the initial manifestation of rheumatoid arthritis. Rupture of the tendons in the hand due to tendinitis may occur without extensive generalized rheumatoid involvement and may be the first incapacitation that the patient experiences.

Articular effusion in the younger patient, especially in the knees, may be the presenting sign in atypical cases. The knees are sometimes stiff and ache slightly but do not cause major incapacitation, and the patient is more concerned with the swelling than the discomfort. Pain in the plantar surface of the heel was previously considered diagnostic of gonococcal arthritis but may be a presenting symptom of rheumatoid arthritis.

The foregoing manifestations may occur in such a manner that at a given time they alone fail to fulfill the diagnostic picture typical of rheumatoid arthritis. Also, symptoms may occur intermittently, early in the course of the disease. Remissions often coincide with a period of nonspecific treatment, which is credited with providing the relief. Subsequent recurrences mean the rheumatoid arthritis is still active. The duration of remissions varies with different patients. Sometimes, rheumatoid arthritis follows an atypical picture of recurring explosive attacks of acute arthritis involving one or two joints and subsiding completely after 36 to 72 hours. The attacks are sometimes so severe that they prevent use of the involved joint. Usually they subside before therapy can be initiated. Such attacks affecting the feet strongly suggest gout, but a normal uric acid level, inefficacy of colchicine, and the pattern just mentioned are suggestive of a diagnosis of palindromic rheumatism, which, I believe, is an atypical form of rheumatoid arthritis. If these patients are observed long enough, they will eventually present a clinical picture of rheumatoid arthritis. Sustained attacks are marked by steady, progressive articular and systemic involvement, with rapid development of muscular atrophy and articular deformities, and rapid deterioration evidenced by loss of weight, malaise, anorexia, and debility. This variation in the pattern of occurrence can also lead to an atypical clinical picture.

Frequently, the clinical picture of arthritis and the systemic symptoms are nondescript. Certain findings cause additional diagnostic confusion.

CUTANEOUS RASH

A rash occurs more commonly in children with rheumatoid arthritis than in adults. It is more pronounced with fever. First, it may be urticarial, but usually it is rusty pink, macular, sometimes slightly raised, and migratory, and is found on the extremities, trunk, and face. In the adult it is often associated with severe systemic manifesta-

tions. From 3 to 5 per cent of patients with rheumatoid arthritis may have psoriasis. The clinical features of psoriatic arthritis differ somewhat from classical rheumatoid arthritis and may cause some confusion. In the psoriatic form the terminal interphalangeal joints of the fingers and toes are frequently involved, the activity of the cutaneous changes parallels the articular disease, the articular symptoms subside more frequently and completely than in classical rheumatoid arthritis, the bones involved may show increased density radiologically rather than osteoporosis, subcutaneous nodules usually are absent, and the serologic reaction for the rheumatoid factor is usually negative. Of interest is the self-limited polyarthritis resembling early rheumatoid arthritis, which can occur as a complication of rubella. A significant number of these patients have positive reactions to the latex fixation test.

LYMPHADENOPATHY

Some patients with rheumatoid arthritis whose clinical picture includes fever and a nearby swollen joint have lymphadenitis. Infection may be considered long before rheumatoid arthritis is recognized. Adenitis occurs frequently in juvenile rheumatoid arthritis and appears shortly after onset of the disease. The glands in the upper extremities are the most common sites involved.

Approximately 30 per cent of adults and possibly a large percentage of children with rheumatoid arthritis have splenomegaly. In children splenic enlargement in the presence of arthralgia and pronounced leukocytosis often causes one to suspect leukemia. In the adult, splenomegaly, arthritis, fever, and leukopenia should suggest Felty's syndrome, which is probably just a type of rheumatoid arthritis.

GASTROINTESTINAL MANIFESTATIONS

If a patient who appears to have rheumatoid arthritis has persistent or bloody diarrhea, the small and large intestines should be thoroughly studied, for arthritis resembling in part rheumatoid arthritis occurs in 10 to 15 per cent of patients with ulcerative colitis or ileitis.

OCULAR LESIONS

Ocular lesions may occasionally precede, but more often follow, attacks of arthritis. Iritis or iridocyclitis is the most frequent ocular complication, occurring in 3 to 5 per cent of cases. It varies in severity and may cause blindness. Other complications, which fortunately are rare, involve the corneoscleral layer of the eye and may result in band-shaped opacities of the cornea or in scleromalacia perforans. A fairly common (10 to 15 per cent) variation in ocular complications is the sicca syndrome, keratoconjunctivitis sicca or Sjögren's syndrome, which varies in extent from a patient with rheumatoid arthritis who complains of dry, tearless eyes to a similar patient who also has a dry upper respiratory tree due to atrophy of the mucous-secreting glands, and has enlargement of the salivary glands due to inflammation with round cell infiltration.

PULMONARY CHANGES

Although pulmonary pathologic changes are uncommon in classical rheumatoid arthritis, adhesive pleuritis or effusion, as well as increased fibrosis, may occur. More unusual, but of greater interest, are granulomatous-like pulmonary lesions, which could easily be confused with a pulmonary tumor. These parenchymal lesions are similar to the subcutaneous nodules, and in my experience their appearance has paralleled the occurrence of subcutaneous nodules about the extremities. Occasionally, however, a solitary pulmonary nodule, which is histologically a rheumatoid nodule, has been found without evidence of active rheumatoid arthritis or peripheral rheumatoid nodules. The pulmonary nodules and fibrosis associated with pneumoconiosis and rheumatoid arthritis (Caplan's syndrome) were first encountered in Welsh coal miners. This condition could, however, occur in other workers exposed to dust hazards.

CARDIAC CHANGES

Whereas studies on the pathologic alterations of rheumatoid arthritis continue to demonstrate evidence of cardiac hypertrophy, pericarditis, vascular sclerosis, and a rheumatoid granulomatous type of injury, clinical cardiac studies of these patients have revealed little. Of interest is increasing recognition of aortic valvular insufficiency due to destruction of the elastic tissue in the aortic valve ring of some patients with ankylosing spondylitis.

NEUROLOGIC AND VASCULAR CHANGES

Paresthesias of the extremities are only rarely significant complications of nonsteroid-treated rheumatoid arthritis. Such patients who have received large doses of adrenocortical steroids, particularly for a long time, may experience burning in the toes, feet and legs, fingers, and hands. This can become the principal complaint. This burning

often does not subside for months, even after discontinuance of the steroid medication. Most of these patients have peripheral neuritis, which in turn, is secondary to an inflammatory vascular lesion of the nerve trunk. Adrenocortical steroids apparently activate the vasculitis. It is recognized that vasculitis may exist in patients with rheumatoid arthritis, but since adrenocortical steroid therapy has been so widely used in treating these patients, there have been a number of reports of severe arteritis as a complication of this form of therapy. Usually this is manifested as peripheral neuritis, and arteritis is found by biopsy or histologic study of the part. Sometimes the initial manifestation may be a painful nodule on a lower extremity which ranges from 0.5 to 2 cm. in diameter. This becomes purplish black, raised, and hot. It may then ulcerate and form an indolent ulcer, which in some patients becomes gangrenous, necessitating amputation of the extremity. Upon appearance of the nodule, the patient has a temperature curve of the septic type and is acutely ill systemically. The vasculitis is relieved after or during slow steroid withdrawal, but sometimes it first becomes symptomatic if the steroids are withdrawn too rapidly.

SKELETAL CHANGES

Osteoporosis with or without compression fractures of the vertebral body is one of the most common complications of adrenocortical steroid treatment for rheumatoid arthritis. It occurs more frequently in women than men, and may be the result of any dosage of steroid that is sufficient to induce regression of an active rheumatoid process. Severe pain in the hip or back and disability with the slightest trauma in such patients should bring to mind possible fracture or symptomatic osteoporosis.

OTHER CHANGES

In the management of patients with rheumatoid arthritis, other disconcerting features may be detected which tend to distract us from the primary disease. Among these is Baker's cyst or popliteal cyst, usually characterized by a simple swelling measuring 5 to 10 cm. in the back of the knee. The typical popliteal cyst may not cause confusion, but some of these cysts extend as far down the back of the leg as the Achilles tendon. They may form rather subtly, quickly causing considerable discomfort and swelling in the calf of the leg, and require surgical removal.

Patients with active rheumatoid arthritis may complain of a sore throat. On examination the oral pharynx appears normal but the larynx in the region of the cricoarytenoid articulation is tender and is actively involved with rheumatoid synovitis, which can affect the vocal cords, causing dysphasia and hoarseness or stridor, and obstruction in some instances, requiring tracheotomy.

LABORATORY FINDINGS

Laboratory tests, although sometimes helpful, may cause confusion. The erythrocytic sedimentation rate may be normal in 10 to 20 per cent of patients with clinically active rheumatoid arthritis. Anemia is frequently present in patients with chronic, severe rheumatoid arthritis, and the unwary physician may search needlessly for other causes. Leukopenia can also be striking in Felty's syndrome, and leukocytosis may be pronounced in children with rheumatoid arthritis. The LE preparation may be positive in 10 to 15 per cent of patients with rheumatoid arthritis.

The agglutination reaction expressed by such tests as the latex fixation is frequently shown by adult rheumatoid arthritics. To date, a specific agglutination test for rheumatoid arthritis has not been found, and positive reactions do occur in other rheumatic and nonrheumatic disorders.

TREATMENT

The natural course of rheumatoid arthritis in an individual patient is impossible to predict. Many patients, however, have serious articular deformities, and complications occur in about 30 per cent of patients. The remainder have milder problems and some have insignificant changes. Patients should be told this, as it provides them with hope, for frequently, each rheumatoid arthritic believes he has the most crippling form of the disease. These patients should be told that therapy has three aims: to make them as comfortable as possible, to prevent articular deformaties, and to help correct these if they occur. A basic program of treatment should be outlined. To allow these patients to believe that one of the currently available medications is the sole treatment is unpardonable.

BASIC PROGRAM

Initially, hospitalization with complete rest may be indicated; this is the best environment in which to explain the basic program to the patient. Later, insistence on more rest than the normal sleeping period is essential. The rheumatoid arthritic who complains of fatigue is not getting sufficient rest. Mental and emotional rest are equally as essential, and emotional disturbances that deprive the pa-

tient of rest should be reviewed. It is often worthwhile to specify the exact amount of rest required, such as 50 per cent bed rest and 50 per cent mild activity.

PHYSICAL THERAPY

This can be classified into exercises and heat therapy. Probably the former is the most neglected phase of treatment, for it is by proper use of exercise that many joints can be saved from fixation and deformity. Indoctrination is usually more effective if an interested physical therapist gives the initial instructions. Frequently, more than simple instructions are needed. The therapist should work daily with the patient in an attempt to restore lost ranges of articular motion and muscular strength by using the proper exercises and muscle redevelopment. In patients with severe, acute rheumatoid arthritis only passive exercises may be possible. Once the acute phase has subsided, assistive active and resistive exercises should be fully utilized. Patients should perform their exercises in a regular fashion each day.

Application of heat to arthritic joints and the surrounding muscles usually affords some temporary relief, and in most patients, it will facilitate the exercise routine. A Hubbard tub or large sized whirlpool, if available, should be used. At home soaking in a full sized tub is preferable to use of a shower. Moist packs and infra-red heat will also help relieve symptoms. Diathermy, ultra-sound and other electronic applications add little, if anything, to the routine treatment of rheumatoid arthritis.

PROTECTION OF INFLAMED JOINTS

Supporting certain joints with plaster splints may be helpful in putting a part at rest and affording some relief for the muscles that are under strain. Cock-up splints for the wrist, which fit the forearm and extend to the metacarpophalangeal joint, can be easily applied with Ace bandages and may help avoid deformities. Posterior plaster shells for the lower extremities may also be helpful in resting knees or ankles and preventing abnormal positioning of these parts as the patient lies in bed.

SALICYLATES

Adequate administration of salicylates continue to be the most useful antirheumatic agent, though rarely is this completely effective. Although complications of salicylate therapy are minimal, gastritis may occur, and gastric hemorrhage develops often enough to warrant being alert to such a possibility. Enteric-coated aspirin may cause less irritation. Other untoward effects of aspirin include alteration in the prothrombin time and allergic reactions. There is no conclusive evidence that buffered salicylate compounds are absorbed more rapidly than nonbuffered salicylates. The degree of gastric intolerance may not always be lessened by using a combination of antacid and aspirin.

ADEQUATE NUTRITION

Maintenance of adequate nutrition is imperative. Vitamin supplements should be given to those with nutritional deficiencies. Normochromic normocytic anemia may cause trouble. This can be corrected only by whole blood transfusions. The risk of unnecessary blood transfusions must be recognized.

ADDITIONAL MEASURES

Adrenocortical steroids are potent antirheumatic agents. Full suppressive action of rheumatoid arthritis requires daily doses of 100 mg. of cortisone, 80 mg. of hydrocortisone or 20 mg. of prednisone. Continued use of such doses causes many, well-known physiologic changes and frequently results in significant complications, such as bleeding gastric ulcer, alteration in host resistance to infection, psychosis, muscular wasting and weakness, disturbed carbohydrate metabolism, electrolytic imbalance, breakdown in pulmonary infection, vasculitis, and osteoporosis.

Because these and other dangers are so real, and because even large doses of such steroids do not seem to alter the natural course of the disease favorably, adrenocortical steroids should be prescribed only after an intensive basic program has failed to reverse the process and the patient is in significant distress. Sometimes adrenocortical steroid therapy is of value in helping the patient carry out a basic program. Physicians and patients should accept less than the optional result from adrenocortical steroids. Larger doses are not to be used and a minimum of adrenocortical steroid is to be prescribed.

The suggested daily maximum doses of cortisone or its equivalent in other steroids for postmenopausal women is 20 to 30 mg., for premenopausal women 30 to 37.5 mg., and for men 37 to 50 mg. These doses may partially relieve the annoying rheumatoid discomfort and incapacitation but will not cure the disease. Failure of these doses to provide relief does not justify use

of larger amounts in the routine management of rheumatoid arthritis.

Failure of adrenocortical steroids to fill the therapeutic needs in the treatment of rheumatoid arthritis has revived interest in crysotherapy. The debate on the value of gold therapy in rheumatoid arthritis continues, but there now is wider acceptance of its use by many critical rheumatologists. Gold therapy appears to offer a better chance for remission or major improvement, and although it is most effective when given early, it may be beneficial at any active stage. A previous reaction is a prime contraindication to gold therapy, but significant renal or hepatic dysfunction or severe debility would also prevent its use.

Gold sodium thiomalate (Myochrysine®) and gold sodium thioglucose (Solganol®), both soluble salts containing 50 per cent gold, are the most widely used. They are administered intramuscularly, beginning with doses of 10 to 15 mg. at weekly intervals for two to three doses followed by weekly injections of 20 to 50 mg. of gold salts. Usually at least 300 mg. of gold salts have to be administered before the patient notices any favorable change. The weekly injection of gold is continued until maximum benefit is obtained or until 1 gm. of salt is administered.

At this time the result of gold therapy should be evaluated. If it is significant, maintenance therapy of 20 to 50 mg. is injected at intervals of two to three weeks. The exact amount of gold needed is probably dependent on the urinary gold excretion. Unfortunately, determination of excretion of gold is not yet a practical clinical procedure. Gold toxicity occurs in about 35 to 40 per cent of patients and necessitates discontinuation of therapy in about 10 per cent of patients. It has been noted that the incidence of favorable therapeutic response is high in patients in whom mild reactions, such as dermatitis, develop. A weekly blood count and urinalysis should be obtained before each injection, at least for the first few months of therapy. The attending physician should also question the patient so that signs of gold toxicity can be detected.

The antimalarials, chloroquine and hydroxychloroquine, may be helpful in early mild active rheumatoid arthritis. Doses of 400 to 500 mg. daily should be given. Improvement seldom is noted before two weeks. Toxicity may necessitate discontinuation of the drug. Certain changes may occur in the lens of the eye after prolonged use of antimalarial drugs, in which case use of the medication should be discontinued.

SURGICAL MEASURES

If one or two joints are primarily involved with rheumatoid arthritis, intra-articular injection of one of the adrenocortical steroids may relieve local symptoms for a limited time. Hydrocortisone acetate is the most widely used steroid for intra-articular injections, but some of its esters may be longer acting. From 25 to 37.5 mg. of hydrocortisone acetate or hydrocortisone tertiary butylacetate (TBA) is injected into larger joints. More lasting effects seem to be attained when the interphalangeal and metacarpophalangeal joints are injected. In a selective group of cases, injection of a small amount of nitrogen mustard plus hydrocortisone seems to reduce the synovitis and rheumatoid granulation tissue in the small joints of the hands.

Significant advances have been made in hand surgery for rheumatoid arthritis. This is a relatively new field made possible by better understanding of the mechanics of hand function and the changes that occur in rheumatoid arthritis. Surgery should be performed before the rheumatoid arthritis is "burned out" at which time it may be too late to accomplish much. Early correction of ruptured tendons, especially of the extensors of the fingers, excision of tendon sheaths to relieve tenosynovitis, particularly the flexion tendons, or correction of a carpal tunnel syndrome due to rheumatoid swelling may be helpful.

Arthrodesis of the deformed, unstable, or painful interphalangeal joints of the fingers and thumb may afford a stable, useful digit. Contractures of intrinsic muscles causing flexion of the metacarpophalangeal joints and hyperextension of the proximal interphalangeal joints are sometimes caused by overpull or contracture of the intrinsic muscles. These can be corrected by removing a segment of the oblique fibers of the extensor aponeurosis in a triangular fashion (Littler's operation). Ulnar drift of the fingers may be helped by synovectomy of the metacarpophalangeal joints, replacement of the central tendons, plus other procedures to insure proper repositioning of the phalanges. Arthroplasties of the metacarpophalangeal joints may also prove beneficial if the joint has been dislocated and the articular cartilage damaged. Replacement arthroplasty for the finger joint in its early stages of development offers hope of success.

Fusion of the severely damaged and painful rheumatoid arthritic wrist is often of value. Re-

moval of a damaged patella is sometimes helpful for the rheumatoid arthritic knee.

Other orthopedic procedures can often afford relief or stabilization of a rheumatoid arthritic joint.

CLOSING REMARKS

Rheumatoid arthritis can involve almost all body systems. In some instances these changes may be mild and in others they are severe and possibly irreversible. The clinical picture can be so varied as to cause diagnostic confusion. Steroid therapy may amplify some of the changes and cause confusion. Treatment should be directed toward the patient as a whole, and a good basic program should be outlined to each patient with rheumatoid arthritis. Adrenocortical steroids should be prescribed with caution and only in selected patients. Only small doses of adrenocortical steroids are recommended. Gold salts may be beneficial and should be considered in the therapeutic program. Corrective and preventive articular surgical procedures have a growing place in the management of the rheumatoid arthritic patient. ★★★

3503 Prytania Street

THE LITTLE CASKET MAKER'S LAMENT

I

I'm a maker of caskets for dear little tots
 Who come to a premature end,
And when I was younger I used to sell lots
 To sorrowing parent and friend.
But now I am older, my lucrative trade
 Has totally gone to the wall,
And the dear little caskets my old hands have made
 Just now have no market at all.

II

In the days of my youth I was lucky indeed
 With infant mortality high.
Diphtheria, measles, and fevers would breed,
 And, oh! How they died in July!
But now that the doctors and druggists have won
 Their war against me and my trade,
Now all that is left is my last bit of fun—
 My own little casket I've made.

Refrain

So be damned to the doctors and scientists all
 And the damned drugs and serums they made,
For these are the people that led to my fall
 And ruined my life and my trade.

Courtesy Frank G. Dickinson, Ph.D.
New York

Salicylate Intoxication

ARTHUR LINDSEY JR., M.D.
Cleveland, Mississippi

SALICYLATE INTOXICATION has had renewed interest in the past few years, first because of its frequency of occurrence and, second, because of the improved methods of treatment that have become available. It is not surprising to learn that salicylates have become one of the leading causes of poisoning in the home when one considers that aspirin is found on almost every medicine shelf. In addition to accidental ingestion, overdosage of aspirin by a parent or physician in the treatment of fever is a leading cause of intoxication.

PHARMACOLOGY

The oral salicylates are used in medicine to reduce pain and fever and to treat rheumatic fever. Salicylic acid is used topically for keratolysis and methyl salicylate (oil of wintergreen) is used externally in liniments as a counterirritant.

Salicylates increase the respiratory minute volume without usually increasing the rate of respiration. This is thought to be due to the respiratory center being sensitized to carbon dioxide. The electrolyte pattern is also changed by therapeutic doses of salicylate. The carbon dioxide combining power is decreased while chloride is increased, serum pH is unchanged or slightly elevated. This is the pattern of respiratory alkalosis which is compensated for by the kidneys in part by excreting sodium and potassium. There are practically no effects on the cardiovascular system at therapeutic doses.

Individuals showing idiosyncrasy to salicylates may have tachycardia or premature ventricular contractions. Ingestion of salicylates may cause gastric irritation with nausea and vomiting. Gastric irritation is due mainly to the increase in free hydrochloric acid rather than due to local irritation of salicylate. Nausea and vomiting are also thought to be due to the central action of salicylate rather than due to local effects. Little effect is exerted upon the liver and kidneys. In high doses a uricosuric effect is noted.

In rare instances the plasma prothrombin is reduced during salicylate therapy. This is due to the competitive action against Vitamin K in the formation of prothrombin. The antirheumatic actions of salicylates are poorly understood. This process is thought to be due to the action on certain enzyme systems, particularly hyaluronidase. The pituitary-adrenocortical system is apparently not related to the antirheumatic effect of the salicylates.

Absorption of salicylate is chiefly from the upper intestinal tract. Acetylsalicylic acid is poorly soluble in water and is slowly absorbed reaching peak levels in the blood approximately two hours

The aspirin has become a public panacea.
"Got a headache? Take an aspirin!"
"Eyes hurt? Have an aspirin!"
"Teeth giving trouble? Try an aspirin!"
"Tired and weary? Take an aspirin break!"
"Morning-after-the-night-before? Where're the aspirin?"

As a consequence, like TV and radio, no American home is without them. Any enterprising child can round up enough for a good case of salicylate intoxication. Many a mother who would never leave matches within a child's reach, thinks nothing of letting aspirin boxes lie around the house.

Thus, it is no surprise that salicylates have become one of the leading causes of poisoning in the home. In addition to accidental ingestion, overdosage of aspirin in the treatment of fever or other conditions is a leading cause of salicylate intoxication.

The author discusses the pharmacology, physiology, and treatment of salicylate intoxication.

Read before the 75th Semi-annual Meeting, Delta Medical Society, Greenwood, April 12, 1961.

after ingestion. After absorption, distribution is rapid throughout all body tissues. Excretion is slow with approximately 50 per cent of a given dose eliminated in 24 hours.

PHYSIOLOGY OF INTOXICATION

Salicylate idiosyncrasy is a rare untoward response to the drug. The symptoms are those of an allergic reaction and are treated as such.

Mild intoxication occurs in older children and adults usually as a result of therapy after repeated administration of large doses. The symptoms consist of headache, dizziness, tinnitis, difficulty in hearing, blurred vision, mental confusion, sweating, thirst, nausea, vomiting, and hyperpnea.

Acute intoxication almost always occurs in the pediatric age group due to accidental ingestion of aspirin or methyl salicylate. Three basic effects occur: (1) primary increase in minute respiratory volume, (2) increase in metabolic rate and production of carbon dioxide, and (3) disturbance in the metabolism of carbohydrate and lipids with increase in organic acids.

The primary increase in respiration is due to sensitization of the respiratory center to carbon dioxide. The respiratory minute volume is increased without an increase in rate of respiration. This results in an increased loss of carbon dioxide through the lungs causing a respiratory alkalosis. In addition to the buffering systems in the blood, the kidneys try to compensate for this condition by excreting bicarbonate, sodium, and potassium, and conserving chloride. The urine is initially alkaline but may become acid later due to depletion of base from the body.

The second effect, which may occur simultaneously, is an increase in metabolic rate and production of carbon dioxide. This is responsible for the increased body temperature sometimes found in salicylate intoxication. This effect tends to increase the carbon dioxide combining power but is usually dominated by the tendency of hyperpnea to reduce the carbon dioxide combining power.

Carbohydrate and lipid metabolism is effected causing a rise in blood sugar and the production of ketone bodies. Ketosis is more common in infants and young children and is rarely seen in adults. The effect of this disturbance is to produce a metabolic acidosis.

It is apparent from the foregoing discussion that several primary effects may act simultaneously in producing the acid base disturbance in intoxication. In general, in older children and adults respiratory alkalosis is the dominant picture, whereas in infants and young children a mixed disturbance is seen with the tendency toward metabolic acidosis.

Three situations are seen clinically. In all, the carbon dioxide combining power is decreased but the pH of the blood may be alkaline, normal, or acid.

In a typical case following accidental ingestion of a large dose, respiratory alkalosis is the dominant picture initially due to hyperpnea. This may later revert to metabolic acidosis rather rapidly when the respiration becomes depressed and the compensatory mechanisms in the kidney have caused depletion of base from the body.

PREVENTION—BEST TREATMENT

Prevention is the best treatment. Public education and physician education along with changes in design of caps on aspirin bottles are aiding in this direction. Once overdosage has occurred, the first step is to remove salicylate from the stomach as rapidly as possible by lavage. This should be performed even for as long as two hours after ingestion. The second step is to appraise hydration and electrolyte balance. Fluids should be started to correct dehydration which is often present because of the concurrent illness for which the patient is being treated. Generally the solution used should resemble the electrolyte concentrations of extracellular fluids. Twenty to 50 ml. per kilogram of body weight, depending upon the degree of dehydration, is used initially. Care should be taken to avoid sedatives because of the possibility of later depression of the nervous system by salicylates. It must be remembered that clinical symptoms may not appear for several hours following ingestion and that observation in the hospital is necessary.

If the patient presents with the dominant picture of respiratory alkalosis it is usually not necessary to correct the electrolyte disturbance with special fluids. Hyperpnea, if severe with the threat of tetany and convulsions, may be treated by allowing the patient to breathe 5 per cent carbon dioxide in oxygen. Rebreathing expired air may also be helpful. The hazard of this treatment is that hyperpnea may be aggravated since the respiratory center is sensitized to carbon dioxide. Calcium may be tried if tetany develops and curare type drugs have been used in special cases.

When metabolic acidosis is the dominant picture, large amounts of alkali are not indicated. The risk of acidosis may be less than the risk of overtreatment. Usually sodium bicarbonate or sodium lactate is given following initial hydration and restoration of kidney function. The calculated amount of alkali to be given should raise the car-

bon dioxide combining power about 50 per cent toward normal.

REMOVAL OF SALICYLATE

Salicylate blood levels of 35 mg. per cent are often associated with intoxication and even lower levels may produce intoxication in infants. Alkalinization of the urine will greatly increase the excretion of salicylate. Diamox has also proved to increase salicylate excretion. Both of these methods are hazardous because they aggravate existing electrolyte imbalance. In severe poisoning the artificial kidney has proved very effective in removing salicylate from the blood. If used, the primary purpose of the dialysis should be to remove salicylate and not to correct the electrolyte imbalance. Peritoneal dialysis has also been used but is less effective than the artificial kidney. Exchange transfusions are also effective and is a method available to most physicians. ★★★

111 North State Street

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SOAKED SURVIVAL

I

The horse and mule live 30 years,
And nothing know of wines and beers.
The sheep and goat at 20 die,
And never taste of Scotch and rye.
The cow drinks water by the ton,
And at 18 is mostly done.

II

The dog at 16 cashes in,
Without the aid of rum or gin.
The cat in milk and water soaks,
And lo, in 12 short years it croaks.
The modest, sober, bone-dry hen,
Lays eggs for nogs and dies at 10.

III

All animals are strictly dry,
They sinless live and quickly die.
But many sinful, ginful men,
Live out their three score years and 10.
And, you—will you be one of few
Who's pickled til you're 92?

—Linn's Stamp Weekly

The Management of Facial Injuries

Part II of III

RICHARD T. FARRIOR, M.D.
Tampa, Florida

The management of fractures of the mandible, maxilla, and the middle face is the subject of Part II of this three-part paper. The author outlines preferred procedures and describes his armamentarium. Part III will appear in the November Journal MSMA.

PART I OF THIS PAPER considered facial bone injuries of the nose, frontal sinus, and zygoma. Fractures of the mandible, maxilla, and the middle face will be discussed in this section.

MANDIBLE

Considerable attention has been given elsewhere to the diagnosis by clinical examination of fractures of the mandible and to the various muscle-pulls which account for the positions of the individual fragments. The disturbed myodynamics and proper dental occlusion should be reviewed thoroughly by anyone undertaking the management of these fractures.

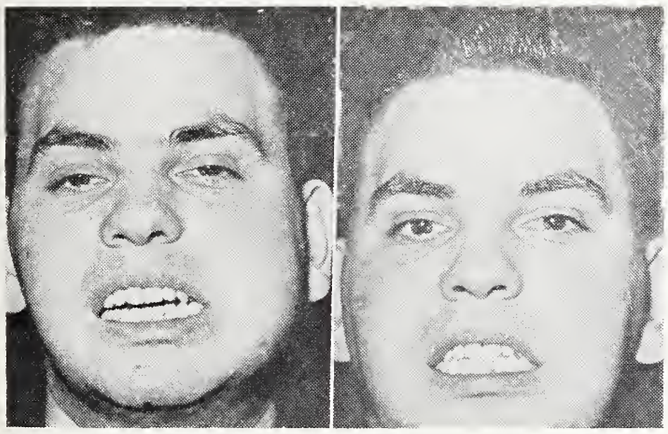


Figure 9. Fracture of Mandible. Left: Six weeks following injury to lower jaw without previous reduction. Note open bite and swelling over left angle of mandible. Right: Postreduction dental occlusion.

Simple fractures of the body or lower in the ramus of the mandible in the majority of cases may be managed by application of arch bars and the use of dental elastics between the upper and lower arch. I very strongly prefer the use of elastics to interdental wiring both for safety and for utilization of the principle of traction. With traction, alignment almost always will improve in natural occlusion. The elasticity guards against pain yet produces a continuous pull following the principles of traction as in the reduction of any other fracture. When prepared dental elastics are not available, these are easily made by cutting small rubber tubing.

The physician should have at his command the use of the various interdental wires, such as the Ivy loops, for use when arch bars are not available. Various simple modifications of the bar bridging

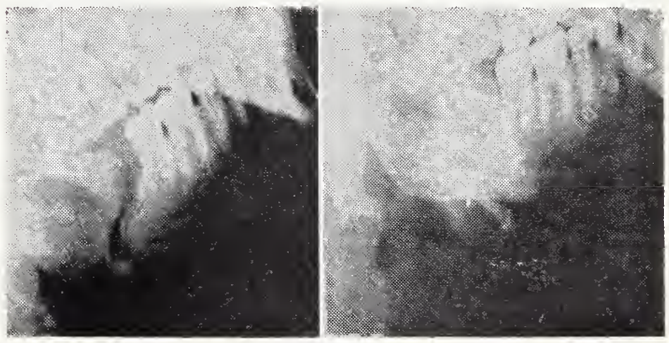


Figure 10. Fracture of Mandible. (X-rays of patient in Figure 9) Left: Fracture across angle of mandible with slight displacement. Right: Following reduction with combined direct interosseous wiring with figure of eight sutures through four burr holes and interdental wiring.

Read before the Section on Eye, Ear, Nose and Throat, 93rd Annual Session, Mississippi State Medical Association, Biloxi, May 9-11, 1961.

areas where there are missing teeth are often useful and should be familiar. We have found little objection to the use of direct wiring of the mandible fragments. Through the external incision the movements of the fragments can be critically evaluated and correlated with the alignment of the teeth above. Either direct firm wiring with four drill holes or a simple figure of eight through single drill holes on either side of the fragment add to stability and overcome the muscle pull (Fig. 9, 10, 11).

We have on occasion utilized "intermedullary" wiring with Kirschner wires across the fracture site but in several instances have discarded this rather nice principle and reverted to the simpler techniques both for their very simplicity and the certain maintained alignment.

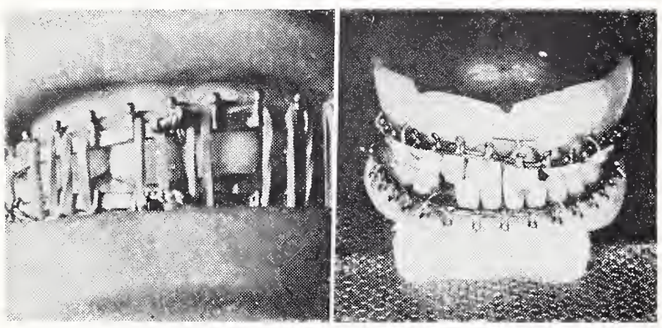


Figure 11. Wiring. Left: Interdental elastics are preferred to direct interdental wiring for the benefits of continued traction and improved occlusion in the patient in Figures 9 and 10. Right: In a mandible fracture in an edentulous patient, the patient's own dentures are utilized for combined circumferential wiring and interdental elastics. Better stability and splinting is obtained when the combined interdental appliance is utilized as opposed to simple circumferential wiring.

When the patient is edentulous, either his own dentures are used or an acrylic or other plastic mold is made, the fractures wired directly and splinted with the prosthesis by circumferential wiring. When necessary, the upper plate has been wired directly through the alveolus and to the anterior nasal spine for stability and an arch bar placed onto the upper dental plate (Fig. 11, 12).

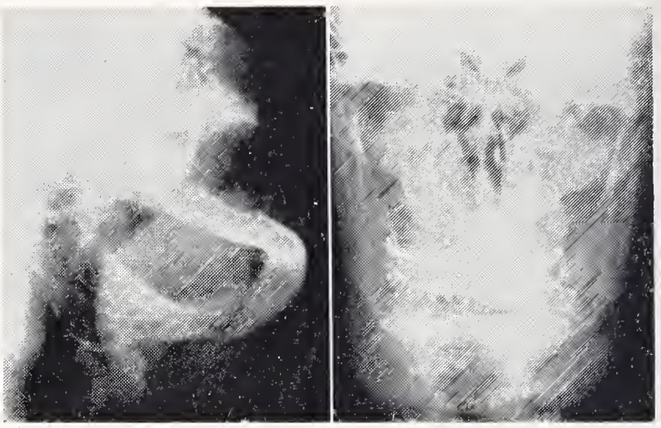
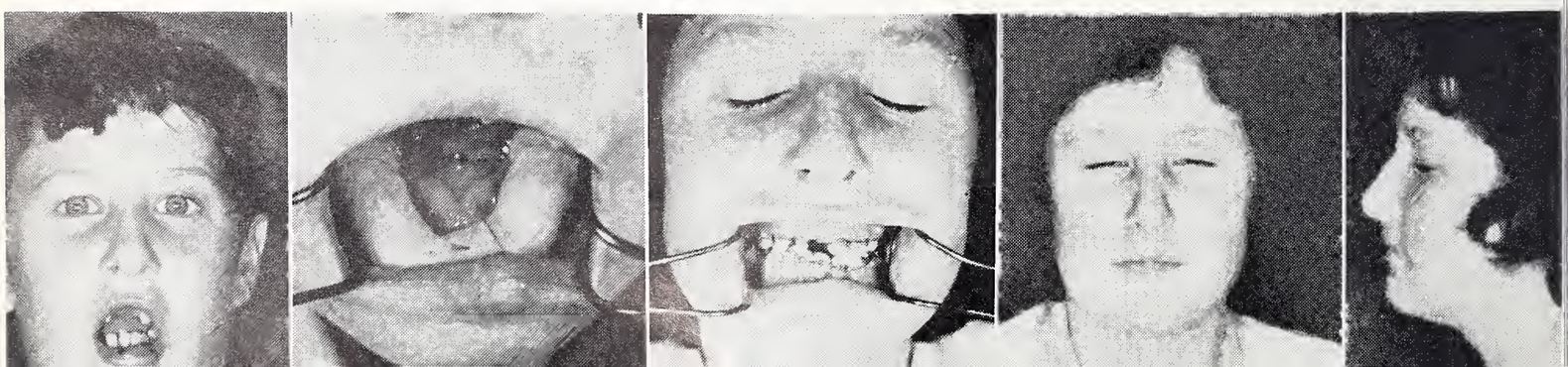


Figure 12. Mandible Fracture in an Edentulous Patient. (Circumferential wiring and interdental elastics shown in Figure 11.) Left: Fracture prior to reduction. Right: The maxillary denture is fixed by direct-wiring through the alveolus and to the anterior nasal spine. Circumferential wiring is passed such that there are at least two wires on each side of the fragments. A combined external reduction with a figure of eight wire about the margin on the mandible was performed.

This same technique combined with wires extending upward beneath the cheek, as in middle third fractures of the face, is utilized for holding the plate up against the palate and the lower portion of the maxilla up by either direct wire into the cranium or to some type of outrigger appliance. Acrylic splints and circumferential wiring are useful in managing fractures in children or when teeth are loose but retained (Fig. 13, 14).

In the majority of cases, fractures of the condyle can be treated conservatively with simple wiring of the teeth in occlusion for a period of four to six weeks. With marked angulation and

Figure 13. Severe Comminuted Fracture of Mandible with Avulsed Inferior Alveolus. (a) Three days following injury and finger removal of the entire lower central inferior alveolus from deep within the substance of the tongue. The four central teeth and a small rim of alveolar bone were pushed posteriorly into the tongue away from the other bone fragments. (b) Acrylic mold for circumferential wiring (see Fig. 14). (c) Orthodontic appliance for repositioning displaced teeth. Teeth survived despite marked displacement and minimal alveolar bone in this fragment. If in doubt, attempt to preserve all teeth. (d) Postreduction anterior view. (e) Postreduction lateral view. Because of the multiple bone fragments, some drainage and the removel of one spicule of bone produced increased scarring beneath the margin of the mandible which is to be repaired.



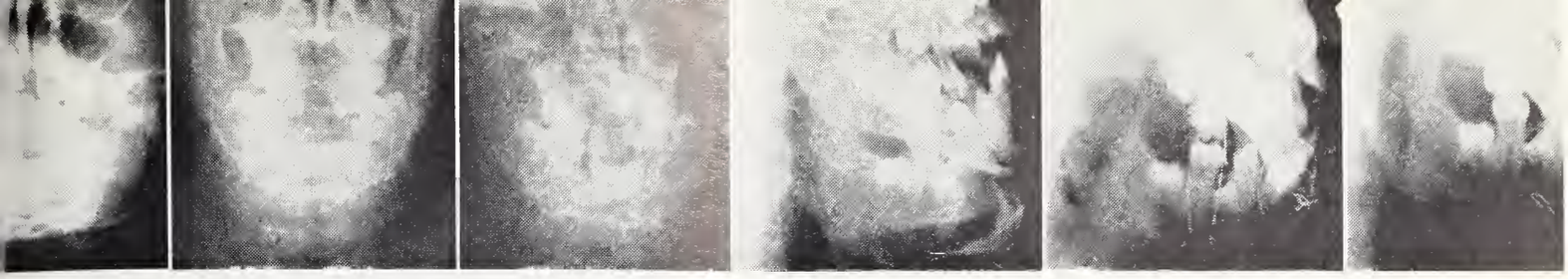


Figure 14. X-Rays of Comminuted Fracture Symphysis of Mandible with Avulsed Inferior Alveolus. (Patient in Figure 13) (a) Anterior view showing free floating anterior alveolus and central teeth and large inferior bony fragment. (b) Combined circumferential wiring and external interosseous wiring of multiple fragments. (c) Healed fractures showing viable central teeth with only slight depression of position. (d) Lateral view showing marked displacement and comminution of synthesis. (e) Lateral view showing circumferential wiring and position of inferior central teeth after forward reduction. (f) Healed fracture.

persistent pain, the reduction may be accomplished by open exposure and direct interosseous wiring or the use of a Kirschner wire (Fig. 15). This exposure is technically difficult and the threat of temporary or permanent facial paralysis must be given due consideration.

In regard to any fractures involving either the upper or lower dental arch, I do not hesitate to call a dental consultant if there is any question regarding alignment, the viability of a tooth, or the need for intraoral appliances other than simple wiring. This consultation is obtained first and foremost for the best interest of the patient. Secondly, if the dentist sees the complexity of the problem as it exists at the time of the injury, especially with associated middle third fractures, he is better able to plan future treatment and finally less apt to criticize small shortcomings of occlusion if he has seen the complications primarily. We have enjoyed excellent cooperation from the dental surgeons, and I both appreciate and encourage their consultation.

On several occasions, teeth have been partially extruded with the injury or almost completely extruded and we have reinserted them both as space retainers and with the possibility of the patient retaining the tooth. If the dentist has seen this, he is less apt to feel that the appliance you have placed on the teeth or poor management caused the loss of this tooth which, without this maneuver, would have been lost anyway.

MAXILLA AND TRANSVERSE FACIAL FRACTURES

Short of actual loss of bone substance, as in gunshot wounds, the middle facial fractures are perhaps the most difficult to treat and require the greatest attention regarding analysis of each component and their individual or combined reduction. The classic LeFort types of transverse facial fractures are purposely omitted to encourage individual analysis and thinking regarding these fractures which more often than not are combined. One rarely sees the classic simple fracture. Not only are the various type transverse fractures combined but they are more often combined with associated fractures of the nose, zygoma, or mandible due to the necessarily severe nature of the blow, usually at high-speed impact.

The goals regarding function are maintenance of a normal nasal airway, proper dental occlusion, and preventing diplopia. There may be obstruction, partial or complete, of the nasolacrimal duct system due either to poor alignment or actual tears associated with poor alignment. The patient



Figure 15. Fracture Mandibular Condyle. Generally, open reduction of condylar fractures is discouraged as satisfactory function and occlusion can be obtained with simple interdental wiring. In this fracture, angulation and displacement were marked and there was a combined fracture of the body of the mandible. Open reduction and direct interosseous wiring was carried out.

must be critically evaluated for skull fractures and cerebrospinal fluid leaks.

To obtain the goals mentioned, we primarily are anxious to stabilize the maxilla by pulling it forward to prevent the dish-face deformity and upward to maintain approximation of the fragments. With a combined malar fracture, it is important to first elevate the malar bone well over



Figure 16. Combined Multiple Facial Fractures and Lacerations. Left: Multiple lacerations associated with complete depression of left side of the face with combined nasal maxillary and mandibular fractures. Deep laceration of eyebrow, almost total avulsion with small pedicle segment of left upper lip. Right: Three months after injury, horizontal tracheotomy scar is readily revised.

the maxilla, aligning the infra-orbital structures as accurately as possible, and then as the last maneuver, pulling the maxilla up and fixing it in position. Fractures of the medial third of the orbital rim or lateral nasal vault are often impossible to reduce until all lateral compression from the zygoma and inferior compression from the

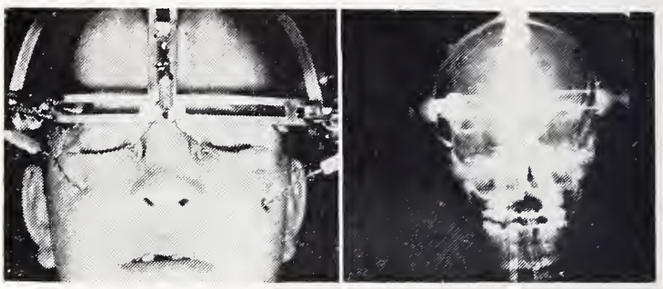


Figure 17. Combined Multiple Facial Fractures and Lacerations. (Same patient as in Fig. 16) Left: External appliance utilizing mechanical springs on nasal bones and maxilla. Kirschner wire passed through nasal bones for pulling superiorly and outward. Wire on right passes directly to dental arch bar. On left, wires combined from dental arch bar to infra-orbital rim. The majority of facial fractures can be managed by open reduction and direct wiring to the cranium and do not require head caps or external appliances. This head cap has been most satisfactory when used. Right: External appliance in place, showing Kirschner wire across nasal vault.

maxilla has been alleviated. When this is done, the medial segment can be pulled into position and then held in this position by reapproximation with the zygoma laterally and the maxilla below.

In the past, middle facial fractures in particular stimulated the inventiveness of the physician in developing elaborate head caps and external appliances. Many of these appliances remain necessary and are certainly most useful in the arma-

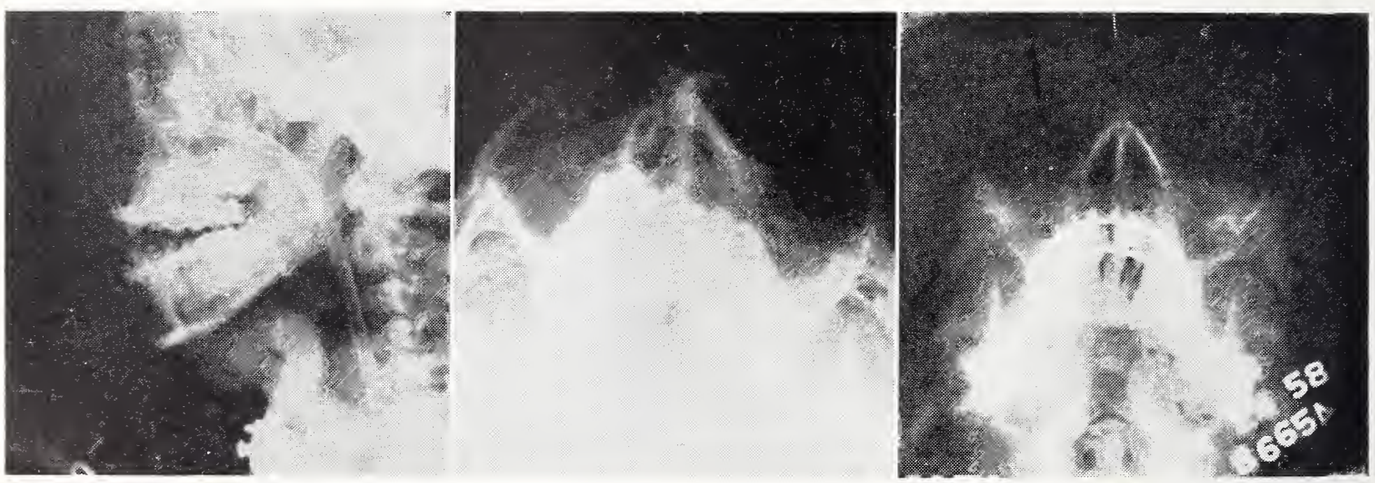


Figure 18. Multiple Combined Facial Fractures. (X-rays of patient in Figures 16 and 17.) Left: Initial treatment in this combined severe head injury included simply a tracheotomy and application of the arch bar. The nasogastric tube is in place. Middle: Submental x-rays showing fracture of palate with marked posterior displacement of entire alveolar arch and left side of midface. Right: In addition to the interdental wiring and external appliance, traction was placed from the lingual surface of the superior dental arch from the molar area of one side to the opposite side to hold the split palate in apposition. Direct interosseous wiring was carried out on the left infra-orbital rim and the margin of the mandible.

mentarium (Fig. 16, 17, 18). However, the trend in modern management of these injuries is towards open reduction, direct interosseous wiring, and wiring to the patient's own cranial vault (Fig. 19, 20). What better and more stable head cap than the patient's own cranium? The author has found few transverse fractures so severe that they could not be maintained adequately, and I sometimes feel better reduced, by the latter techniques without requiring any outrigger or external type of fixation.

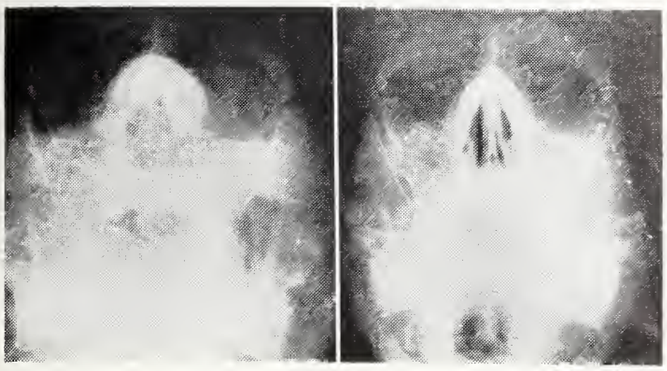


Figure 19. Bilateral Combined Transverse Facial Fractures. Left: Bilateral transverse fractures with marked displacement of the medial one-third of the orbit, impacted between the zygoma and nasal bones. Nasal bones per se have been reduced in this x-ray. Right: Open reduction and direct interosseons wiring, utilizing the principle of fixation to the patient's own cranium in preference to any head cap or external appliance. Wires are passed from the dental arch bar posterior to the zygoma and fixed to the zygomatic process of the frontal bone. The associated fracture in this area is wired directly as are the fractures of the infra-orbital rim. The impacted medial third of the infra-orbital rim could not be reduced until the nasal bones and zygoma had been moved away and the fragment grasped with a forcep and forced out. Once the zygomatic compound has been reduced, the maxilla is pulled forward and upward and maintained in position until fixed.

As mentioned, the classification of fractures is omitted, both for brevity and because the majority of these injuries are complicated and combine more than one type of fracture. The surgeon must critically evaluate these injuries, individualizing the particular problems and using his ingenuity as he calls upon his entire armamentarium of techniques. No one technique can be followed all of the time, whether internal or external fixation, direct wiring, or what. I believe that the results are sometimes jeopardized by tending to stick to one technique or one appliance rather than to the requirements of the particular injury.

I would like to commend one of our neurosurgeons, one of our oral surgeons, and an engineer in Tampa for devising what I consider to be one of the best head caps I have seen, designed on the principle of fixation to the cranium with small burrs similar to the Crutchfield tongs utilized in cervical fractures for traction (Fig. 16, 17, 18). In working with the same engineer, we developed several devices for reduction of nasal fractures and the maxilla without utilizing external fixation by the classic Roger-Anderson splint (Fig. 16, 17). In the facial fractures treated over the last five years, however, I have used this external appliance only one time and again urge the use of internal fixation and fixation to the patient's own cranium directly both for its accuracy and its convenience without calling upon elaborate equipment. The tendency towards the more simple and direct reduction resulted from field management in maxillo-facial units of these fractures during World War II and the trend has been away from external appliances.

With the internal wiring, the arch bar is applied in the usual manner and the wire passed in front of the zygoma to the infraorbital rim when this area is not involved. When the zygoma is involved, the wire is passed from the molar area behind the zygomatic compound and beneath the zygomatic arch to the zygomatic process of the frontal bones and fixed here (Fig. 19 and 20). Again, prior to wiring into position, all superior separate reductions such as that of the zygoma and the nose or medial third of the orbit are carried out as mentioned.

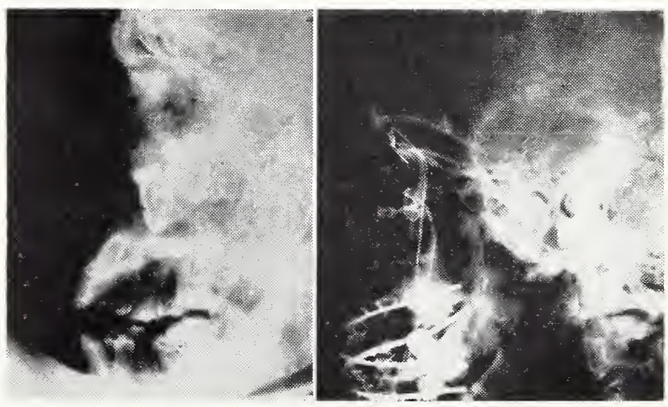


Figure 20. Bilateral Combined Transverse Facial Fractures. (Same patient as in Figure 19.) Left: Lateral view showing fracture of zygomatico-frontal articulation and across the nasal bones and lamina papricia. Right: Lateral view demonstrating wires passing posterior to the zygoma from the molar region.

While an assistant is holding the maxilla forward by a wire passed about the arch bar in the midline, the maxilla is set superiorly in firm position by tightening the wires placed above. When the infra-orbital rim is not fractured, the superior wiring is carried directly to the rim over the

zygoma (Fig. 22). Wiring to the infra-orbital rim may be possible on one side while wiring to the zygomatic process of the frontal bone is required on the other. When the fracture passes across the roof of the nose and through the area of the lamina papricia, it may be necessary to pass a Kirschner

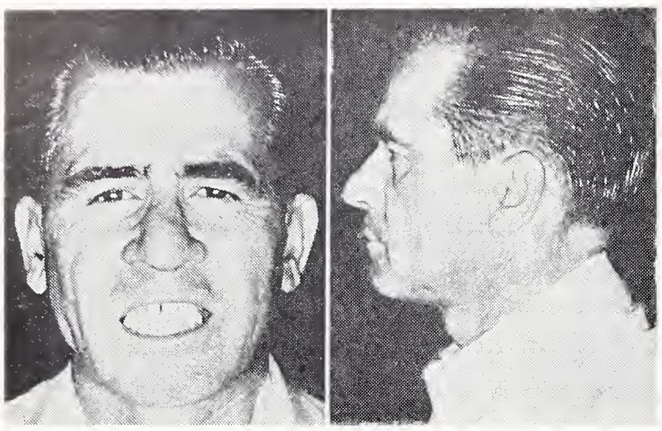


Figure 21. Postreduction Fractures Shown in Figures 19 and 20. Left: Dental occlusion and infra-orbital symmetry postreduction. Right: Profile showing satisfactory position of middle third of face without dishface deformity, by the utilization of direct wiring and no external appliance.

wire through the entire nasal compound and hold this upward and outward with an external appliance (Fig. 16, 17, 18). Similarly when reduction cannot be obtained by other methods outlined or illustrated in the accompanying figures, a Kirschner wire may be passed across the entire maxilla and traction placed in the appropriate direction. When reduction is difficult and position cannot be maintained, an external appliance may be essential for continuous traction and the benefit of slowly pulling the fragments into position. Again, one should not be bound fast to any one technique for reduction of these sometimes complicated fractures.

As mentioned above, in the edentulous patient, the patient's own dental plates may be used either for circumferential wiring or combined upper and lower jaw wiring, fixing the upper plate directly into the alveola arch or anterior nasal spine and utilizing this with the superior wiring for holding the entire maxilla up. Elastics may be applied to the arch bar then on the patient's own dentures. I have found it most advisable and I would strongly urge that the interdental elastics be used even in fractures of the maxilla alone as the mandible serves for further splinting and is more apt to insure good occlusion. With the teeth placed in occlusion and held there by elastics, there is less apt to be the posterior displacement of the maxilla and the resulting dish-face deformity.

When the palate is split vertically in association with these injuries, again elastic traction is utilized. With the reduction of the maxilla as outlined, a wire loop is made on the lingual surface of the upper arch and elastics are passed across the palate from one molar region to the other and from the area of the bicuspids to the corresponding opposite side, thus pulling the palate together (utilized in case shown in figures 16, 17, 18). Again this is supplemented by proper occlusion with splinting of the maxilla and mandible together.

For circumferential wiring of the mandible or passing a wire from the superior arch bar through the cheek to an external appliance or to the orbital rim or cranium, the following techniques are suggested: 1. A large (3″) curved cutting needle may be used to carry the wire. In circumferential wiring the needle is carried from the buccal sulcus through the skin and reinserted through the same skin puncture about the opposite side of the mandible. 2. Utilizing a No. 17 or No. 18 hypodermic needle, the needle is passed as a guide and the wire threaded through its lumen to the desired position. The guide needle is then withdrawn.

Postoperative deformities may result from malalignment necessitating either refracturing and reduction by the methods outlined, with the removal

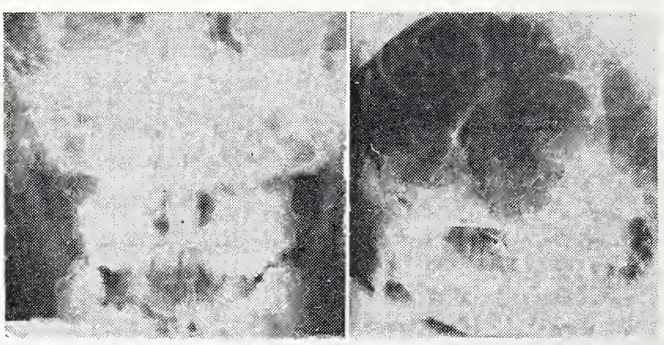


Figure 22. Transverse Maxillary Fracture. Left: Fracture across maxilla extending into pyriform aperture without involvement of orbit. Right: Direct wiring to lateral infra-orbital rim with wires extending anterior to the malar eminence. This technique is recommended when the infra-orbital rim is intact.

of intervening fibrous tissue or bony callous or correction by camouflage with implants of autogenous or preserved homogenous tissue (Fig. 24, 25). In major implants, cancellus bone is without question the best material. On the other hand, for smaller implants in the nasal dorsum, beneath the eye, or in the floor of the orbit, autogenous or preserved homogenous cartilage may be utilized. With refracturing, the segment must be com-

pletely mobilized, all intervening tissue removed and more often direct interosseous wiring carried out (Fig. 24).

ELECTRIC DRILL

At this point, before leaving fractures where interosseous wiring may be utilized, I would like

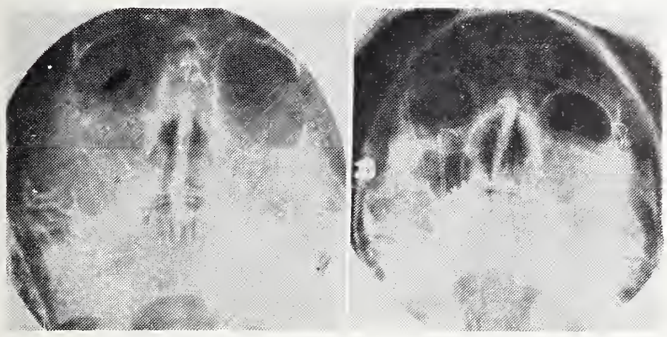


Figure 23. Multiple Middle-Third Facial Fractures. Left: Waters view showing multiple fractures and comminution of the nasal bones, marked fracture dislocation of the left zygoma including comminution in the zygomatico-frontal area, transverse inferior fracture, and fracture of right medial third of infra-orbital rim. Right zygoma laterally intact. Right: Combined wiring technique utilizing intact right zygoma where open reduction was carried out in infra-orbital rim and wire passed directly from intact lateral fragment to dental arch. On left, wire passed from molar region posterior to zygoma for direct fixation to the frontal bone. Comminuted zygomatico-frontal fragments threaded on fine wire for interosseous fixation.

to familiarize the reader with the use of some basic equipment I have found useful. We have been raised and trained with the use of the dental drill and in many areas the drill handle, straight or contra-angled, with the variety of drill tips, is irreplaceable. For the production of small drill holes to receive wires through heavier bone or out in the open, a motor-driven unit using the standard 1/16″ drill tip and Jacobs chuck has been most helpful (Fig. 26). It is difficult to get fine cutting dental burrs with a long enough shaft that is as small as the 1/16″ or even smaller standard straight drill tip for going through thicker bone. The neck of the dental drill may not be sufficient to carry this small cutting burr deep enough and then the hole must be enlarged to accept the shaft. With the small standard drill tips, the hand drill, if not passé, is certainly crude and traumatic. Even in the use of a small hand drill, which necessitates fairly firm stabilization of often small bone fragments, these fragments may be completely dislocated or ripped away from small remaining fragments of attached periosteum. The advantages of high speed delicate perforation without pressure on the bone fragments and minimal trauma are obvious.

The unit I have used (Stryker) utilizes a motor-driven cable which may be sterilized and does not require drapes as with the dental drill (Fig. 26). This in itself is an expedient. The fact that no draping is required, especially with an emergency nursing staff not trained in the management of the dental drill and its sterile draping, is an advantage. The hand piece is the standard hand piece used with the dermabrasion unit and I first became familiar with it in this use. Either the dermabrasion cylinder may be replaced by the Jacobs chuck or if the wire brush is used in

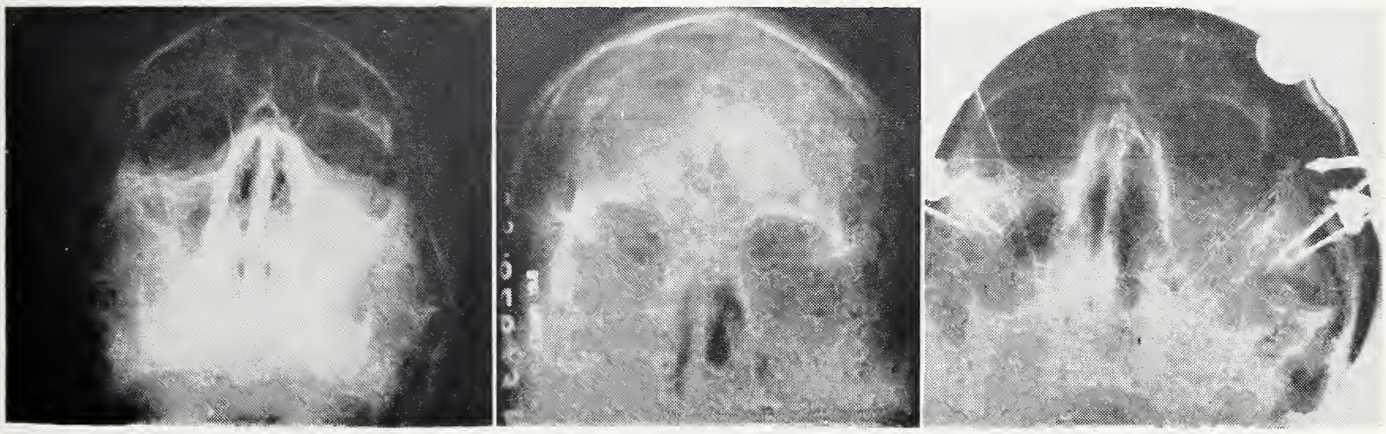


Figure 24. Refracturing Unreduced Left Zygomatic Fracture. Left: Displaced position of left zygoma despite elaborate external appliance, using modified Roger-Anderson external fixation. Open reduction and direct wiring eliminates this possibility. The fractures cannot be forced to fit the appliance. The technique selected must be individualized for the case. (b) This is the same patient after initial reduction as he presented to the author, complaining of both persistent diplopia and the external deformity. Note increased diagonal diameter and separation in zygomatico-frontal area. (c) Refracturing accomplished through the limited incisions and direct wiring of the three areas of dislocation carried out. Segments of intervening fibrous tissue and callus must be removed.

dermabrasion, the brush itself is simply replaced by the drill tip in the Jacobs chuck. This unit is driven with an auto-accelerator type foot pedal

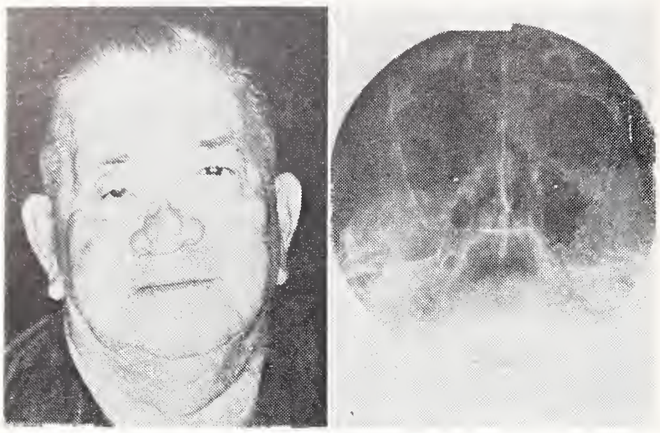


Figure 25. Unreduced Middle Third Combined Fractures. Left: Anterior view 30 years following severe injury. Chief complaints of pain from glasses on dorsum of the nose and plugged right nasolacrimal duct. Diplopia? Note marked displacement of right cheek and eye. Right: X-rays showing the marked displacement and separation of the zygomatico-frontal area. Refracture, onlay implants, or pass?

which can be readily controlled both as to speed and starting and stopping.

MAXILLO-FACIAL SAW

This same sterilizable cable may be attached to the maxillo-facial saw handle which works on the same principle as the oscillating cast remover. This small readily maneuverable hand piece has various saws, one of which has approximately a 4″ extension which is most useful in surgery of the mandible or in refracturing healed but malaligned facial bones. The oscillating saw has the advantage of minimal destruction of bone along the incision line and eliminates the fear of cutting adjacent soft tissues which exist with the revolving saw. If one finds that a small revolving saw would offer an advantage in a particular situation, this can be applied to the hand piece described above using the Jacobs chuck.

TEMPORAL BONE FRACTURES

Fractures of the temporal bone frequently are associated with other fractures of the cranial vault or facial bones. Critical evaluation of the extent of these injuries is mandatory. Sixty to 80 per cent of basal skull fractures involve the middle cranial fossa and since the temporal bone occupies two-thirds of this fossa, it is easy to see how this bone becomes involved.

These fractures are classified into the horizontal or longitudinal type and the transverse type through the petrosa. Isolated labyrinthine fractures involving only one portion of the labyrinth have been reported. Miscellaneous and localized injuries are usually due to an injury with a small object or bullet. Each type of fracture may be bilateral and may occur in combination with the other types. Transverse fractures may be further classified anatomically into internal and external types and clinically, especially as concerns injuries to the facial nerve, into the surgically accessible and the surgically inaccessible. The facial nerve injury may be considered surgically accessible if the damage is distal to the geniculate ganglion. Diagnosis is made by careful otologic history and physical examination and critical evaluation of the x-rays, preferably with the otologist and radiologist in direct consultation as the x-rays are being read. Fortunately, x-ray

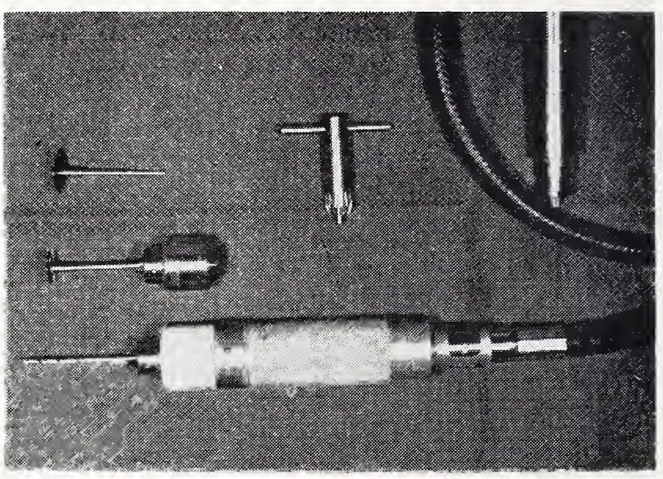


Figure 26. Cable, Hand-piece and Jacobs Chuck for 1/16″ Drill Tip. Cable may be sterilized and does not require draping. Electric drill offers advantages of minimal pressure on small bone fragments and longer drill shaft has advantages over the standard dental drill tips. Circular saw attachments are shown, however, the author advocates utilization of the maxillo-facial oscillating saw.

evaluation is more conclusive for the more serious transverse fracture than for horizontal fractures. A negative x-ray does not rule out fracture. The Mayers view is the best single view for the longitudinal fractures and the Stenvers is the best single view for fractures of the labyrinthine capsule. For demonstration of both fractures and a description of the pathological anatomy, the Towne view is used.

Treatment of the majority of temporal bone fractures is conservative. Even with facial paraly-



Figure 27. Facial Paralysis. Left: Gunshot wound with lead slug lodged in sino-dural angle of mastoid, having severed the facial nerve enroute. Middle: Note the level of the eyebrows, facial sagging on the right and deviation of the midline of the lip to the uninvolved side. Right: Postoperative appearance following correction of the eyebrow and the use of fascia lata slings to the temporalis muscle and masseter muscle slips to the angle of the mouth. Attained facial symmetry is gratifying.

sis, 90 per cent will recover completely or partially. The remaining 10 per cent must be critically evaluated for possible surgical intervention. Generally, a period of from two to three months should be allowed for signs of return of facial nerve function before considering surgical repair. If paralysis is immediate and complete, one is justified in performing facial nerve surgery as soon as the patient's condition allows. Decompression of the nerve in its intratympanic and vertical segments is employed when the nerve is intact but injured. Decompression and end to end anastamosis in the Fallopian canal is possible when the nerve fibers are interrupted but not for more than 2 mm. If the distance is greater than 2 mm. the free nerve graft is the procedure of choice, although rerouting of the nerve in a newly-fashioned facial canal along the anterior wall of the external meatus and end to end anastamosis is possible if the destroyed nerve section does not exceed 23 mm.

When the above-outlined procedures are not feasible or there is loss of muscle function with stretching of cutaneous and muscle tissue, some form of reconstructive plastic procedure can give gratifying results (Fig. 27). Above the eye, lateral tarsorrhaphy, blepharoplasty, and raising the level of the eyebrow are helpful. Some form of face-lift is often beneficial for the sagging cutaneous tissue and may be combined with fascia lata strips attached to the temporalis muscle. Masseter muscle strips may be utilized to give some animation and lateral pull to the mouth, the midline of which is most often pulled far towards the uninvolved side. Obtaining any permanent animation with either temporalis or masseter muscle pull has been disappointing. However, the attained facial symmetry in repose is gratifying and the patients are usually most grateful (Fig. 28).



Figure 28. Facial Paralysis. (Same patient as in Figure 27.) Left: Placement of fascia lata slings. Right: Masseter muscle slips combined with fascia lata strips.

With the advances in otologic and plastic surgery and with combined efforts in these two fields, let us hope that the grotesque deformity of facial paralysis can be prevented or greatly improved.

(This paper will be concluded in the November, 1961, issue of JOURNAL MSMA with a discussion of soft tissue injuries.) ★★★

Bayshore Boulevard at Hyde Park Avenue

Clinicopathological Conference XXI

Conducted by the Department of Pathology
Mississippi Baptist Hospital
Jackson, Mississippi

On May 15, 1960, this patient, a 66-year-old white male, was found unconscious while attending stock car races. He was admitted to the Mississippi Baptist Hospital and the final diagnoses were cerebral artery arteriosclerosis, diabetes mellitus, mild, and arteriosclerotic heart disease. He was placed on a restricted carbohydrate diet and Coumadin and discharged on May 20.

A year later, the patient was again admitted to the Baptist Hospital complaining chiefly of generalized abdominal and low chest discomfort. His prothrombin time had been found to be quite prolonged two weeks prior to admission and the anticoagulants had been omitted for about a week. He had been seen by a urologist because of hematuria and had been found to have an enlarged and nodular prostate gland.

A week after discharge he was again admitted because of severe generalized ecchymoses and petechiae extending over the entire body. Admission laboratory work showed that a moderate anemia had developed since the second admission, and there were very marked and extensive abnormalities within the coagulation mechanism of the blood. The patient was found dead in bed on the morning of July 9, 1961.

Discussers are Drs. Guy Gillespie, Kenneth M. Heard, Ralph Daniel, and Robert P. Henderson.

THIS PATIENT WAS A 66-year-old white male whose first admission to the Mississippi Baptist Hospital was at 1:00 a.m. on May 15, 1960. Earlier in the evening he was found in an unconscious state while attending stock car races. His daughter, who accompanied him to the emergency room, stated that he had never had any similar difficulties in the past. There had been no headaches or paralysis. He had been complaining of some nausea and marked shortness of breath on slight exertion for the past several months. There was no known history of diabetes. The past history taken after he regained consciousness revealed that he had had a staggering gait, especially at night, for approximately one year. Otherwise it was noncontributory.

EXAMINATION DATA

He appeared as a well-developed, well-nourished white male with a flushed face lying in deep coma on the examining table in the emergency room. No localizing neurological signs were present. There was total areflexia. The blood pressure in the right arm was 90/? (by palpation only), and 0/0 in the left arm. The skin was warm, moist, and elastic. The pupils were equal and regular, reacting normally to light. The eye grounds were normal. There was no nuchal rigidity. There were no deformities of the chest. Expansion was equal bilaterally. The lungs were clear to auscultation and percussion.

The heart rhythm was regular with a slow ventricular rate (about 60 per minute). There were no murmurs, thrills, shocks, or friction rubs detected. The heart sounds were somewhat faint. There were no abdominal masses or tenderness and no ascites. The liver, kidneys, and spleen were not palpable. The peripheral arteries were all palpable and pulsatile. A rectal examination was not done. A lumbar puncture showed an opening pressure of 210 to 214 mm. water. The closing pressure was 132 to 136 mm. water. The fluid was clear. It was noted that while in the emergency room and about 15 minutes after arrival, complete recovery of consciousness occurred, and no neurological defects were noted.

Electrocardiograms taken during this admission were interpreted as "abnormal—myocardial damage with questionable posterior wall injury." The spinal fluid showed two cells per cubic millimeter with both being lymphocytes. The total protein was 39 and the sugar 121 mg. per cent. Admission laboratory work showed a hemoglobin of 14.6 gm., a sedimentation rate of 23 corrected to 16, and a hematocrit of 42 vol. per cent. The total white count was 7,800 with 76 per cent neutrophils, 2 per cent eosinophils, 17 per cent lymphocytes, and 5 per cent monocytes. The urine showed a specific gravity of 1.008. The albumin was 2 plus. There was a trace of sugar. There were rare white blood cells and 10 to 25 red blood cells per high power field. An initial prothrombin time on May 15 was 12 seconds with a control of 12 seconds. A serum transaminase on May 16 was 30 units. Another on May 17 was 30 units. One on May 18 was recorded as 86 units and one on the 19th as 110 units. On May 19 a fasting blood sugar was 135 mg. per cent and a postprandial sugar was 159 mg. per cent.

The clinical impression was basilar artery insufficiency. He was placed on Coumadin therapy. His prothrombin times then became prolonged with the one on May 16 being recorded as 22 seconds or 20 per cent of normal activity and on the 17th as 27 seconds or 17.5 per cent of normal activity. He was discharged from the hospital on May 20, 1960, and was asymptomatic at the time. He was placed on a restricted carbohydrate diet and Coumadin, 5 mg. per day. The final diagnoses as recorded were cerebral artery arteriosclerosis, diabetes mellitus, mild, and arteriosclerotic heart disease.

SECOND ADMISSION

The next admission of this patient to the hospital was on June 23, 1961. At this time he complained chiefly of generalized abdominal and low chest discomfort. It was stated that since the previous admission he had received 7.5 mg. of Coumadin daily until June 9, 1961, at which time it was temporarily discontinued because of hematuria for a period of some three days. At that time his prothrombin time was 45 seconds. It was resumed on June 17, 1961 with a dosage of 2.5 mg. daily. It was stated that for the past two or three days he had been aware of generalized abdominal discomfort and discomfort in the right upper quadrant, and in the right lower chest. During the period of time that he was having hematuria, early in June, he was seen in the office of a urologist who found a 3 plus enlargement of the prostate with some nodularity. In the emergency room at the time of this admission his prothrombin time was 20 seconds, and he was given vitamin K in the emergency room and admitted for further treatment and study.

Physical examination revealed a well-developed, well-nourished white male in no distress, but with scattered ecchymotic areas subsiding over the abdomen, chest, and extremities. The only other remarkable finding on physical examination at this time was a mild, generalized abdominal tenderness on deep palpation, but no masses or rebound tenderness were found. His hemoglobin on admission was 14.1 gm., his hematocrit 42 vol. per cent, and total white count 6,000 with 63 per cent neutrophils, 3 per cent eosinophils, 1 per cent basophils, 29 per cent lymphocytes, and 4 per cent monocytes. The platelets appeared adequate. There was a trace of albumin in the urine. The sugar was negative. There were 0 to 3 white blood cells per high power field and 2 to 6 red blood cells per high power field.

X-ray studies included an intravenous pyelogram which was normal. The chest showed only atherosclerotic changes in the aorta and some osteoarthritic changes of the dorsal spine. Cholecystogram and upper GI studies were essentially negative, although a repeat cholecystogram was felt desirable because of gas overlying the gallbladder. No anticoagulant was given during this hospital admission, and he was apparently taken off at this time and given none following discharge which was on June 27, 1961.

FINAL ADMISSION

The last admission of this patient was on July 3, 1961. He was admitted because of "breaking out on the skin." It was stated in the present illness that prothrombin times done in the office on June 30, 1961, and July 1, 1961, "showed evidence of hypoprothrombinemia." He was seen in the office on the morning of admission at which time generalized ecchymoses were noted over the entire body with some petechiae over the legs and feet. He was in no apparent distress. The blood pressure was 110/80, temperature 97.6. Examination of the head, neck, chest, lungs, and heart was not remarkable. There was moderate tenderness over the right lower chest wall on percussion laterally. No abdominal masses were felt. The spleen was not palpable.

The admission blood work showed a hemoglobin of 11.7 gm., a hematocrit of 34 vol. per cent and a red blood count of 3,550,000. The total white count was 6,500 with 40 per cent lymphocytes, 1 per cent eosinophils, and 59 per cent neutrophils. The admission urinalysis showed a specific gravity of 1.003, albumin and sugar were

negative. There were no white or red blood cells. A repeat blood count on the following day showed a hemoglobin of 12 gm., hematocrit of 36 vol. per cent and a platelet count of 240,000. The prothrombin time on the date of admission was 27 seconds or 14 per cent of normal activity. Bilirubin was 0.5, cholesterol 248, and alkaline phosphatase 3 units. Cephalin flocculation was negative. The acid phosphatase was 0.8 units on the first check. A later acid phosphatase was reported as 1.5 units. Other hematological findings included a Lee-White coagulation time of 45 minutes. A clot was taped to the patient's bed and apparently lysis began almost immediately. In the qualitative test for fibrinogen the clot was not formed. The prothrombin consumption was 12 seconds. Seventy per cent normal plasma was required to correct the prothrombin time to 100 per cent of normal activity.

The patient was found dead in bed on the morning of July 9, 1961.

DISCUSSION

Dr. Guy Gillespie: "The case today is somewhat unusual in that we have three hospital admissions summarized, the first being a little more than a year ago. On this first admission, the patient was admitted to the emergency room in an unconscious state with a low blood pressure, this apparently having a sudden onset. There had been some nausea and marked shortness of breath on slight exertion for several months. It was also stated that he had had a staggering gait, especially at night, for the past year. The physical examination was normal except for the coma. A lumbar puncture revealed a moderate elevation of the spinal fluid pressure. Shortly after admission to the emergency room he regained consciousness, and no neurological defects were noted. Apparently this was simply an episode of syncope. We know of some cases in which there is elevated spinal fluid pressure, relief of which will afford recovery from an episode of syncope of this sort. However, I presume that since this happened only 15 minutes after arrival, he had recovered consciousness prior to the lumbar puncture.

AGING PROCESS

"Electrocardiograms were made during that admission and have been reviewed. These were taken over a period of several days and apparently did not show a great deal of damage. There are minor changes present. In addition to the cardiograms there is a series of transaminase tests which reveal a rising amount of transaminase in the blood which would be consistent with either a myocardial infarction or a cerebral infarction, and I presume that the myocardial infarction would be more likely in this case because of the signs of damage on the electrocardiogram and because of the lack of residual signs in the nervous system. The clinical impression on this admission was basilar artery insufficiency and also arteriosclerotic heart disease and mild diabetes. I find no reason to disagree with any of these impressions, and I feel inclined to accept them all and attribute them to this man's aging process.

GENITOURINARY ABNORMALITIES

"The one unusual finding on this admission was the urinalysis which showed a 2 plus albuminuria and also 10 to 25 red blood cells per high power field. These findings indicate some abnormality of the genitourinary tract which is not usually associated simply with the aging process, and it is difficult sometimes to tell exactly what the cause of these findings is. We note that no BUN was recorded. The serum proteins were not checked, although some loss of albumin was occurring, and we have no x-ray studies of the kidneys or cultures, so that we have no further information as to why the albuminuria and hematuria should be present on this occasion. There were apparently no complaints from the urinary tract at that time.

BLEEDING AND BRUISING TENDENCY

"Now on the second admission, one year later, he had apparently been maintained on anticoagulants for this entire period of time. Relatively recently—about two weeks prior to admission—he had had an episode of hematuria lasting about three days. His prothrombin time had been found to be quite prolonged at that time, and his anticoagulants had been omitted for about a week and then had been resumed. He had been seen by a urologist because of this hematuria and had been found to have an enlarged and nodular prostate gland. He was admitted, actually, not because of the urinary difficulty, but because of generalized abdominal and low chest discomfort, apparently centering around the right upper quadrant of the abdomen and right lower chest. A finding noted on the admission physical examination was that there were scattered ecchymotic areas over the abdomen, chest, and extremities. These seemed to be subsiding. The rest of the general physical examination was fairly normal, except for the generalized abdominal tenderness on deep pal-

pation, but no masses were palpable, no organs were found to be enlarged, and there was no rebound tenderness.

"His admission laboratory studies on this admission were apparently entirely within normal limits, except for, at this time, a trace of albumin in his urine and two to six red blood cells per high power field. The finding of the nodular, enlarged prostate makes one wonder whether the urinary findings could be derived from the prostate gland rather than from the kidney or bladder.

"X-ray studies were reported for the first time on this admission and included an intravenous pyelogram which was reported to be normal. From this we are presuming that the BUN was also normal, since, if the BUN had been elevated, the pyelogram would probably not have revealed very good function. The chest x-ray is of interest because of the discomfort over the lower chest and the right lower chest in particular, but it revealed only atherosclerotic changes in the aorta and some osteoarthritic changes of the dorsal spine. We presume the lung fields were clear with no evidence of infiltration, infection, or congestion, and we presume that the heart was essentially normal in size and configuration. The rest of the gastro-intestinal and gallbladder studies were reported as normal, although there is some question about the adequacy of the cholecystogram.

"No anticoagulant was given during this hospital admission, and he had no anticoagulant, as far as we know, following discharge. The admission during June lasted only four days, and we have no adequate explanation, from the data presented, for the discomfort in the abdomen and in the right lower chest.

RECURRENT ECCHYMOSES

"On his final admission, which followed the previous one by about one week, he was admitted because of severe generalized ecchymoses and petechiae—severe purpuric lesions—extending over the entire body. These had been treated with vitamin K on the basis of a diminished prothrombin activity in the blood, but there had been little or no response. He was not apparently very ill at this time. The only finding again on physical examination that was remarkable was the moderate tenderness over the right lower chest wall on percussion laterally. Again no abdominal masses were felt. No organs were found to be enlarged.

"The laboratory work on this admission revealed that a moderate anemia had developed. In a relatively short period of time the hemoglobin had dropped from 14.1 gm. to 11.7 gm.; the hematocrit had dropped from 42 vol. per cent to 34 vol. per cent, and the red blood count was 3.55 million. The total white count on both of these admissions was around 6,550 with an apparently normal differential. The platelets were reported as adequate on the blood smear on the first admission and were found to be moderately decreased on the second admission, and these are the only changes that were noted.

"The liver function tests were all within normal limits. This is of interest because of the tenderness and discomfort located in the right upper quadrant and right lower chest regions, which certainly calls attention to the liver, but these liver function tests reveal apparently a normal liver as far as hepatic cellular function is concerned. However, there are very marked and extensive abnormalities within the coagulation mechanism of the blood, and I think that these at least deserve further consideration and will afford us some opportunity to review the coagulation mechanism and the interpretation of the tests in particular.

COAGULATION MECHANISM REVIEW

"I have sketched on the board a very simplified scheme (Fig. 1) of the coagulation mechanism which I think is fairly well accepted generally. I would like to point out that coagulation occurs in three stages primarily, the first of which is

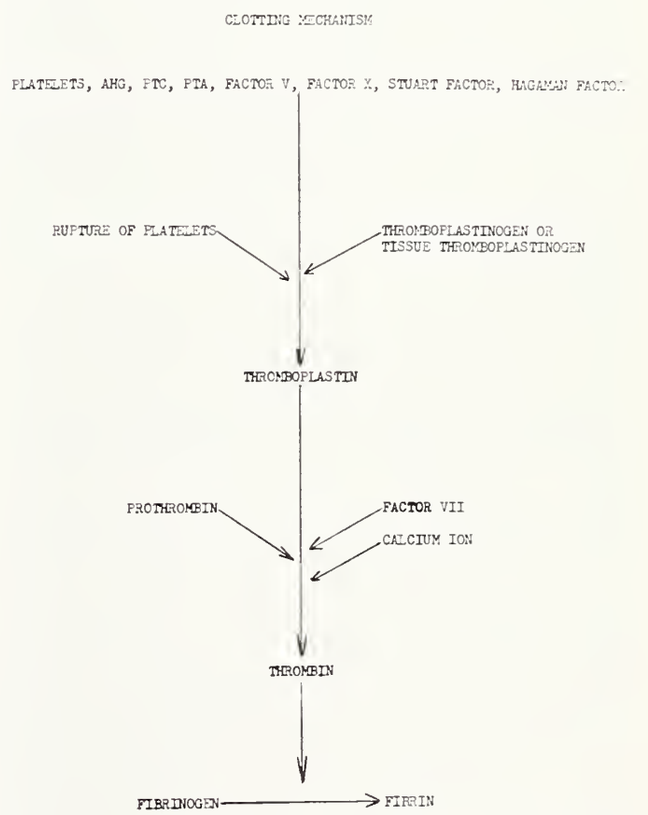


Figure 1. Chart showing steps in coagulation mechanism.

thromboplastin formation, consisting of a reaction between substances provided by the platelets, AHG from the blood, PTC from the blood, PTA from the blood, and Factors V, X, and certain other factors such as the Stuart Factor and the Hagaman Factor. These substances are all present in normal blood to start with, the trigger or initiating event which starts the coagulation process being rupture of platelets, releasing the platelet factor or thromboplastinogen into contact with the other factors, or else they can come into contact with tissue thromboplastin or thromboplastinogen which also will activate this process. The first-stage reaction occurs, producing thromboplastin. This again reacts with prothrombin, Factor VII, and calcium which are present to produce thrombin, and this in turn causes the transformation of fibrinogen into fibrin which forms the blood clot. These are the three stages: thromboplastin formation, thrombin formation, and fibrin formation.

"The one-stage prothrombin time test is designed to test the factors involved in the second and third stages only. In the performance of this test, an artificial excess of thromboplastin is added in the procedure so that none of the first stage factors are tested in the one-stage prothrombin time. We know that the prothrombin time then is a test of the adequacy of prothrombin, Factor VII, calcium, and fibrinogen. The prothrombin consumption test, on the other hand, tests all of the factors in the first stage and does not test most of the factors in the second and third stages. Therefore, the prothrombin consumption test and prothrombin time test together will give a fairly adequate evaluation of the entire coagulation mechanism. If both are within normal limits, then you can fairly well assume that the entire coagulation mechanism is within normal limits.

"In this particular case, the prothrombin consumption was down to 12 seconds, whereas it should ordinarily be above 30 seconds. This indicates some type of deficiency in the thromboplastin component. The prothrombin activity itself was also diminished, being down to 14 per cent with a time of 27 seconds. This would indicate a deficiency of some type in the second or third stage of the clotting mechanism. I should mention that there is one deficiency in this second and third stage group which can affect the testing of the thromboplastin group, and that is that a deficiency of fibrinogen will give a diminished prothrombin consumption. It should be pointed out also that the coagulation time, which was prolonged in this case, 45 minutes, is primarily a test of the factors involved in the first stage thromboplastin formation, but also it can be affected by a fibrinogen deficiency.

FIBRINOGEN DEFICIENCY BLAMED

"A qualitative test for fibrinogen was performed in this case, and a clot was not formed, and, therefore, this indicates a deficiency of fibrinogen in this particular case, so that actually this fibrinogen deficiency can explain the diminished prothrombin consumption and diminished prothrombin activity and prolonged clotting time. Therefore, all these defects can be explained on the basis of fibrinogen deficiency.

"Calcium never has to be considered effectively as a cause of bleeding, because if the calcium level ever goes low enough to interfere with the coagulation mechanism, the patient would be in severe tetany and probably could not survive longer than a very short period of time. Therefore, we never have to consider calcium deficiency, clinically, as a cause of bleeding or deficiency in the coagulation mechanism. This is, of course, used in anticoagulation for laboratory purposes, citrate and oxalate being used to bind the calcium ion.

"Prothrombin and Factor VII are both manufactured by the liver, and if there had been a significant deficiency of prothrombin and Factor VII on the basis of diminished liver function, it almost certainly would have shown up in some other abnormal liver test. You notice that the cephalin flocculation was negative, the bilirubin was well within normal limits, alkaline phosphatase was well within normal limits, and, therefore, we have no reason to suspect that there was any hepatic cellular dysfunction; therefore we presume that the prothrombin and Factor VII were within an adequate or normal range.

FIBRINOLYTIC ACTIVITY INCREASED

"Now the question comes, why do we have a deficiency of fibrinogen? And the answer comes in this test where the blood clot was observed, and it was found to demonstrate lysis, beginning almost immediately after the clot was formed. This means then that we have a fibrinolysin in the blood, and this is apparently destroying fibrin as fast as it is formed, and, therefore, this leads to a deficiency of fibrinogen.

"There is another test which is reported here, and that is that 70 per cent normal plasma was required to correct the prothrombin time to 100

per cent of normal activity. This is a great deal of normal plasma required. In many cases, 10 per cent, 20 per cent, or 30 per cent normal plasma will correct a coagulation defect in the prothrombin test, if this is due simply to a deficiency. The fact that a great deal more normal plasma was required indicates that there is probably something interfering with this coagulation other than just a deficiency of some of these factors. This would imply an active anticoagulant of some sort such as heparin.

"There are many different types of circulating anticoagulants which are formed in response to illness, particularly in response to serious illness, and I do think that we did have a circulating anticoagulant, of the heparin type, in this case, which is interfering with the coagulation mechanism. Many of these anticoagulants also have fibrinolytic activity. Such anticoagulants will also exhibit antithromboplastic activity, as well as antithrombin activity, and therefore, they could be contributing to the diminished prothrombin consumption as well as diminished prothrombin time.

APPROACH TO DIAGNOSIS

"Now this is all interesting to consider for educational purposes in regard to the coagulation mechanism, but it doesn't give us a very good diagnosis in this particular case, because this can be associated with many different types of illnesses and diseases. It usually just means that you have a pretty sick patient on your hands, and often if you check these tests again two or three days after they have been done, you will find that the situation has been reversed, and you no longer have all the severe changes present in the blood coagulation. In this case we have evidence that they had continued for at least a couple of weeks, perhaps longer, and so we feel that whatever was causing these conditions in this patient was more than just a real acute illness. It was a severe and prolonged illness. This type condition can be associated with various types of disease, as we mentioned.

INFECTION RULED OUT

"We do know that it can occur with infection, and I think that we need to consider the possibility of some type of infection here. First, let us consider a virus infection. It could be something like hepatitis. Certainly, we have soreness and discomfort in the area of the liver, tenderness on percussion over the liver and lower rib cage, and yet the liver was not palpable. We have normal liver function tests. There was no jaundice, and the cephalin flocculation was completely negative. This would seem to me to be strongly against any diagnosis of hepatitis. There are other forms of viruses which can produce the same thing—infectious mononucleosis and various other types of viruses—but most of the others are short-lived, and fairly self-limited, and not nearly as severe as hepatitis might be. I think that there is very little evidence really to confirm this finding or possibility.

"We need to consider also tuberculosis and fungus diseases, since they are more along the chronic line or sustained type of infection, and yet we have nothing at all to suggest these. There was no complaint of cough or weight loss. There was no fever and no sweat. The chest x-ray was reported to be normal only a couple of weeks prior to death, and the spleen was not enlarged, which would possibly have been the case with a miliary type tuberculosis. There was no adenopathy to go along with that, and I think that we would be inclined to discard the possibility of tuberculosis and fungus diseases as being the cause of this trouble.

"We need also to consider bacterial infection. Of course bacterial infections can occur in any part of the body, in any organ of the body or outside of the various organs in various spaces. However, in this case the white blood count was always relatively low, around 6,000-6,500. There was no fever. There was never any evidence of pus, either in production of sputum or in urine or abscesses or anything of that sort. Again, the chest x-ray was negative for any sign of infection there, and I think that we would be hard put to report any impression of infection due to virus, tuberculosis, fungus, or bacteria in this particular case.

METABOLIC AND DEGENERATIVE DISEASES

"Metabolic diseases need to be considered. The only one that I can think of that might be of importance here is diabetes, and it was conceded that, on his first admission, he did have a mild form of diabetes—certainly quite mild—and I do not find any evidence that he was having any difficulty from the diabetes on his last two admissions. The sugar was negative in the urine on both occasions, and I do not recall that there was any other evidence of trouble along that line. There was no evidence of the usual complications of diabetes such as retinopathy and neuropathy. I do not believe that that was a very likely factor in his final illness.

"We do have evidence of degenerative disease consisting of arteriosclerotic changes in the cerebral circulation and also in coronary circulation.

These evidences were present primarily on the first admission, and, of course, we know that he continued to have arteriosclerosis which was probably progressive. The only way that I can think that it might have contributed to this final illness would be by formation of some fairly large thrombotic processes, perhaps in the intestinal vessels or in the circulation of the liver or various other organs in that area. I find nothing really to suggest this. There was none of the severe pain that goes along with thrombotic processes, and there was no evidence of a circulatory collapse on these last two admissions, such as accompanied the first admission, and I do not find any way that we could really tie in these degenerative changes with this development of this final illness.

MALIGNANCY SUGGESTED

"The other type of disease in which we have this coagulation difficulty and which might possibly account for some of the rest of these findings would be the presence of malignant disease. We do know that the prostate gland is particularly involved in the coagulation mechanism. In many cases there is often a fibrinolytic activity increase in cases of prostatic carcinoma, and we presume that it could affect the coagulation mechanism with the circulating anticoagulants in the same way.

"We find the development of a moderate anemia along with a moderate thrombocytopenia in this final illness, which could come on the basis of widespread bone marrow invasion by prostatic carcinoma. The tenderness in the right upper quadrant and right lower rib cage could, since we have found no evidence of involvement in the liver or lungs, actually be due to involvement of the bone. The ribs themselves could be involved in prostatic carcinoma and could be giving this tenderness. Other organs could also be involved with malignancy and affect the coagulation mechanism. We know, of course, that practically any of the viscera and especially the pancreas can have effects on the coagulation mechanism. However, the effect of the pancreas is usually to increase the coagulability of the blood rather than to decrease it.

"One other type of tumor that could cause this is a lymphoma. This could also be a widespread process involving the bone marrow. It is not uncommon at all to have involvement of the marrow with lymphoma without any localized definite evidence in the form of adenopathy, enlargement of liver or spleen, or other organs. I am sure Dr. Lockard here will remember the mutual patient which we both have seen in the past year that had this particular problem and who expired several months ago with widespread bone marrow involvement from the lymphoma. As far as making a pathological diagnosis in this case, I am going to merely beg the question and throw up my hands in defeat and say that if I had to bet on something, I would bet on either a prostatic carcinoma or lymphoma with widespread bone marrow involvement, and I think that the final episode in this case was probably a hemorrhagic episode, either intestinal or intracranial hemorrhage, contributing to this man's being found dead in bed. I think that it is very interesting in this case to consider all these various implications of the coagulation mechanism, but I find it difficult to pin down any particular form of pathological diagnosis."

Dr. Kenneth M. Heard: "Any comments from the audience?"

Dr. Ralph Daniel: "Do you think treatment with corticosteroids would affect this process?"

Dr. Guy Gillespie: "We don't know what this man was treated with. I don't know that steroids would have made a great deal of difference. There is no really satisfactory treatment of this type of circulating anticoagulant and fibrinolysis, and it is usually a fairly desperate situation in which you stand with your hands tied or else treat the basic disease which seems to be the cause of it and hope that it will improve. ACTH has been recommended, but I believe that there is a lack of good objective evidence that it really has a beneficial effect."

Dr. Daniel: "Steroids don't have any effect that you know of on a circulating fibrinolysin?"

Dr. Gillespie: "No, I don't think that they would have effect on the circulating fibrinolysin."

Dr. Heard: "Any further comments? Before we get started on the pathological discussion, I would like to get Dr. Henderson to show the x-ray films we have because they are especially interesting, in view of our findings."

Dr. Robert P. Henderson: "In commenting on gallbladder function, it is very satisfactory. No obvious stones are seen. As you can see there is some Telepaque in the colon along with fecal material which makes it difficult to exclude small stones, but I would say that function is good, and this should not be related to the man's illness. The chest films are not remarkable. There is possibly slight flattening of the diaphragm leaves. No cardiac enlargement is noted. The lungs appear to be clear. The rib cage is not remarkable. I might say that these films were all reviewed after Dr. Heard stated that this would be for a CPC, and it

didn't alter our conclusions that we had reached earlier. It is noted that there is some intravesical enlargement of the prostate which would go along with the clinical findings of a large prostate."

Dr. Daniel: "Is there a questionable area in bone anywhere?"

Dr. Henderson: "Both initially and on review there are no destructive areas in the bone. We did not have, primarily, any dorsal and lumbar spines, but we have a very satisfactory study of the rib cage and dorsal and lumbar spines as seen on these views. We even have a lateral film of the lower lumbar spine on this colon study, and it doesn't show any evidence of any destruction."

Dr. Heard: "To go back to the first admission and get that out of the way, we examined the carotid arteries up past the bifurcation at which point the atherosclerosis is usually important, and were unable to detect any. The right vertebral artery was completely normal. Of course we couldn't trace it very far, and the left vertebral was apparently congenitally absent. We could not find its orifice, nor was there one entering the cranial cavity. There was no evidence of old cerebral infarction. We did find a moderate degree of myocardial hypertrophy, the heart weighing 400 gm., and there was some coronary arteriosclerosis, with approximately 40 per cent impingement upon the lumens of the left anterior and right coronary arteries. There was focal fibrosis of the myocardium posteriorly, so if we had to guess we would say that this episode in 1960 was probably related to his heart with the elevated transaminase resulting from small zones of necrosis. As to his underlying illness and disease, when we opened the peritoneal cavity we found enlarged periaortic lymph nodes which were quite hard.

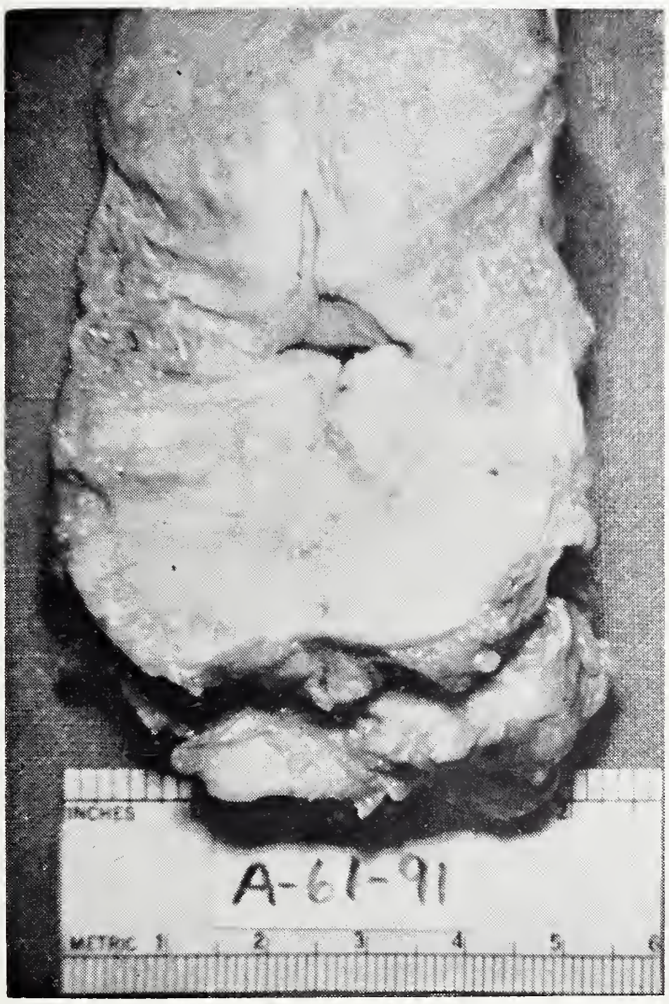


Figure 2. Gross photograph of prostate diffusely involved by adenocarcinoma.

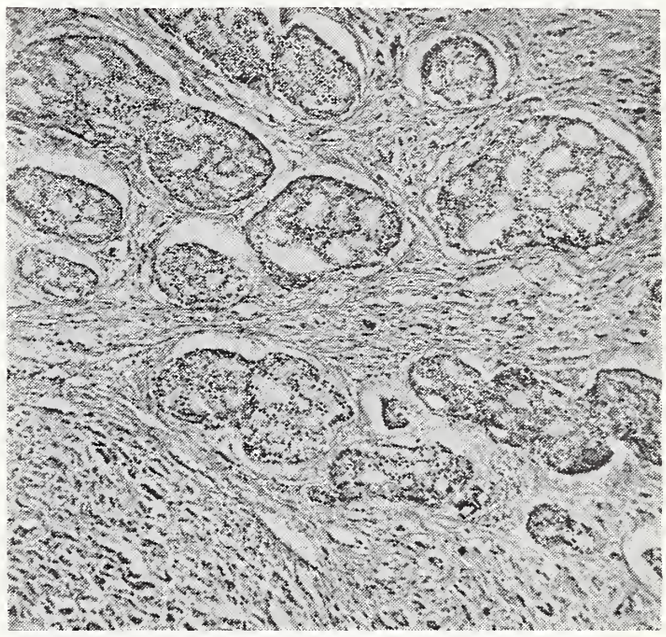


Figure 3. Photomicrograph of prostatic adenocarcinoma.

"The next major finding was an enlarged prostate which weighed 50 gm., and I might add here that this patient was seen actually by two urologists, the first of whom is quoted here as saying it was '3 plus enlarged, slightly nodular and slightly suspicious of malignancy.' The other urologist that examined the prostate said that it was '3 plus enlarged and not suspicious.' I did leave off that 'slightly suspicious.' We don't want to tell you everything. But here is a picture of the prostate (Fig. 2). It was symmetrically enlarged, weighing 60 gm. You see that there is no real gross nodularity, but even on thin transverse sections it felt a little bit firmer than normal, and you see this yellowish-tan homogeneous coloration there. I was not certain grossly that this was a carcinoma of the prostate, but it did prove to be. The whole gland was diffusely involved with adenocarcinoma (Fig. 3).

"We removed large portions of the spinal column, lumbar and dorsal vertebrae, and you see the

light grayish-tan coloration of the marrow spaces here (Fig. 4). The lower lumbar vertebrae were crushed and hemorrhagic in appearance. Microscopically, here we see actual bone marrow metas-

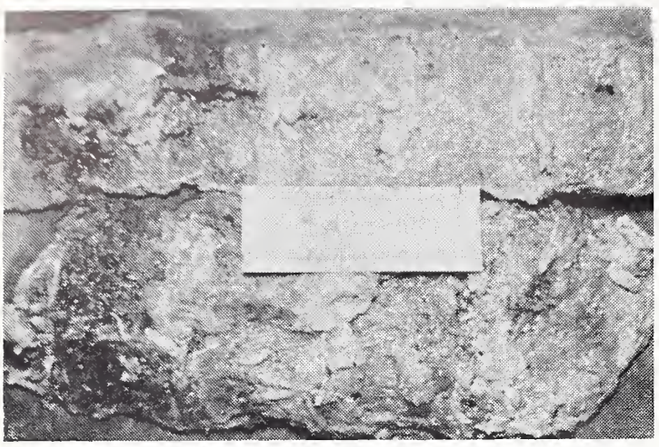


Figure 4. Transverse section of lumbar vertebrae showing marrow diffusely involved by metastatic tumor.

tases, I think, rather than bone metastases (Fig. 5). That may sound odd to you, but I think that this carcinoma was primarily metastatic in the bone marrow as an organ. We didn't examine the sternum or pelvic bones, but I believe that if we had, we would have found similar involvement.

"As Dr. Gillespie stated, I think that this was playing some role in the development of his anemia and thrombocytopenia. If he had lived a little bit longer, he might have developed pancytopenia. At autopsy, although the spleen was not

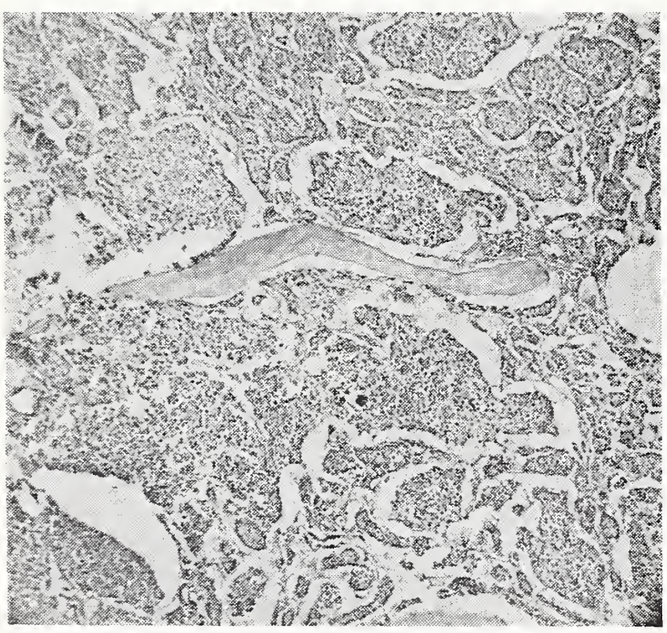


Figure 5. Photomicrograph of section of lumbar vertebra.

enlarged, there was some microscopical evidence that extramedullary hematopoiesis had begun. In the marrow the tumor was growing as solid sheets of tumor. The red zones are zones of hemorrhage and infarction of bone. The lack of elevated alkaline phosphatase was due to the fact that there was no actual osteoblastic activity. The bony spicules appeared perfectly normal, and all the metastatic tumor is between the spicules of the cancellous bone.

"We can see now why Dr. Henderson's x-rays of the bones looked normal. If one had been taken shortly before death, maybe something would have shown up in the lower lumbar vertebrae where this infarction had occurred. That probably happened between the time these were made and death. The immediate cause of death was intra-

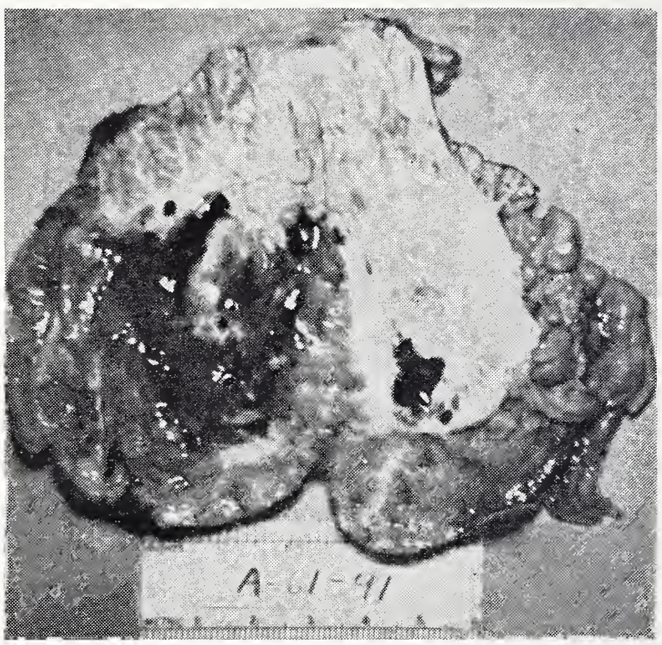


Figure 6. Immediate cause of death: Hemorrhage into cerebellum.

cranial hemorrhage. The meningeal surface of the brain was diffusely hemorrhagic. You see swelling of the brain. There was a big zone of hemorrhage into the left lobe of the cerebellum (Fig. 6). There was also a small hemorrhage in the right lobe.

"So in summary, he had adenocarcinoma of the prostate with metastases to bone and to periaortic lymph nodes. The basis of the bleeding disorder is the presence of a circulating fibrinolysin or proteolytic substance which may be produced directly by the tumor itself, which would, as Dr. Gillespie said, have the potentiality of affecting different levels of the coagulation mechanism."

Dr. Gillespie: "I'd like to mention one similar patient I have seen. A man around 51 years old who was taking anticoagulants because he had had a heart attack turned up with widespread ecchymoses, and the anticoagulants were stopped.

Vitamin K was given, and the ecchymoses did not improve. On complete physical examination, his prostate was small and normal in consistency, even smaller than average for a 51-year-old man. His platelets were diminished as well as his prothrombin time, and on a bone marrow examination he was found to have adenocarcinoma in the marrow. He did have an elevated acid phosphatase, and it was therefore presumed, even in the absence of x-ray demonstration of metastases and with a normal, soft prostate, that it was a prostatic carcinoma, which I think was a very interesting sequence of events. It shows that widespread metastases can occur in the bone marrow without affecting the x-ray picture in the bones."

Dr. Heard: "That's one of the main points we wanted to make. This proteolytic or fibrinolytic thing, some people say, is not the only mechanism involved in production of this afibrinogenemia. I saw one case report in which there was a carcinoma of the prostate and hypercoagulability followed by hypofibrinogenemia because of massive clotting as you see in some of the obstetrical cases where the liberation of thromboplastin-like substance causes clotting throughout the vascular system, then followed by hypofibrinogenemia."

Dr. Henderson: "We took some radiographs of the sections of vertebral bodies after they had been removed, and we still cannot see any real interruption of fine trabeculations."

Dr. Gillespie: "Dr. Heard, how did the kidneys look?"

Dr. Heard: "I don't recall that there were any remarkable abnormalities."

Dr. Gillespie: "Then I presume that the urinary abnormalities, even on the first hospital admission, probably came from the prostate gland. I wonder if a diagnosis of carcinoma could have been made at that time?" ★★★

1190 North State Street

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BY THEIR SECRETARIES YE SHALL KNOW THEM

Chief of the Surgical Service:
"Dr. Jarman regrets that he is not free to hold a telephone conversation at this time."
Chief Consultant in Diseases of the Chest:
"I'm sorry but Dr. Leighton is in conference."
Secretary of the Professional Staff:
"Sorry—Dr. Benton is tied up on long distance."
Visiting Lecturer to the School of Nursing:
"Dr. Smith is away from his desk now."
Chief Resident:
"Dr. Winston? He's on a coffee break. Hey, Willie—telephone!"

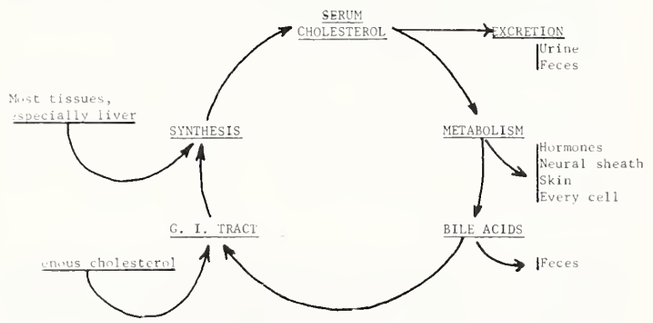
SYMPOSIUM:

Metabolism and Utilization of Cholesterol

THOMAS M. BLAKE, M.D.
Jackson, Mississippi

To date no one has discovered exactly what sequence of events is responsible for the formation of atheromata. Physical exercise, psychic stress and emotional tension, diabetes, heredity, and hypertension have all been suspected as causative agents. The etiologic factor may be something yet undiscovered or it may concern the lipoprotein mechanism. No definite relationship has been shown between cholesterol levels and atherosclerosis, yet the fact that there is a relationship at all makes cholesterol study a vital part of heart research. In this symposium, three internists look at different parts of the cholesterol cycle. Dr. Blake discusses metabolism, Dr. Rosenblatt, pathogenic implications, and Dr. Fyke, current therapeutic agents.

BECAUSE ATHEROMATA CONTAIN cholesterol (among other things), it is safe to say that there is some relation between cholesterol and atherosclerosis, but to assume that this relation is a causal one is quite a different thing. Cholesterol is easy to measure, nothing else has been proved to cause the disease, and the tacit assumption that it plays a significant role in atherogenesis continues to provide a point of departure for many physicians who have to try to treat atherosclerosis and its consequences. They know it is not the answer by itself but no one offers anything better.



METABOLISM OF CHOLESTEROL

It is something like the drunk who, when asked why he was looking for a lost coin at the corner though he had dropped it in the middle of the block, replied that the light was better at the corner.

At any rate, we continue to study and be concerned with the level of cholesterol in the serum. Emphasis varies from year to year on different aspects of the problem as information accumulates, and the over-all effect is an increase in available knowledge concerning lipoprotein metabolism. Ultimately this general approach can reasonably be expected to lead to some measure of control of atherogenesis, though there is little, if any, evidence that we have effectively influenced the course of the disease as yet.

SYNTHESIS

It has been known for at least 40 years that cholesterol is synthesized in the animal body, and for nearly 20 that it is formed in the human body from acetate radicals available in turn from either protein, carbohydrates, or fat. Experiments reported by Taylor and Gould[1] 10 years ago utilized the dog, an omnivorous animal whose lipid metabolism is much like that of man, and demonstrated that there is a sort of homeostatic mechanism governing this synthesis so that the more preformed cholesterol that is ingested, the less there is synthesized, and vice versa.

In the intervening years it has been established that synthesis of cholesterol proceeds in nearly

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From the Department of Medicine, University of Mississippi School of Medicine.
Read before the regular meeting of the Central Medical Society, Jackson, May 2, 1961.

SYMPOSIUM:

Pathogenic Implications of Cholesterol

WILLIAM H. ROSENBLATT, M.D.
Jackson, Mississippi

THE PHYSICIAN is constantly bombarded by medical and drug literature relating to fats and cholesterol and by patients who have picked up uncritical reports of new discoveries in diagnosis and treatment through the nonmedical press.

While it is commonly accepted that an abnormality in lipid metabolism is intimately associated with the pathogenesis of atherosclerosis, knowledge of the particular lipids and the precise mechanism involved is lacking. In fact, it would appear that the entire subject of atherogenesis and the proposed laboratory diagnostic procedures for its detection have reached a contentious level.

Since World War II many etiologic factors have been implicated in atherosclerosis. These include the fat content of the diet and serum cholesterol levels, physical exercise, psychic stress and emotional tension, sex variation between males and females, hypertension, diabetes, and heredity.

This paper is restricted to the role of cholesterol in the pathogenesis of atherosclerosis. Perhaps it would have been more fitting had I been assigned a discussion of serum lipids since the measurement of serum cholesterol levels appears to have the least diagnostic value with respect to atherogenesis, unless the latter are markedly elevated to readings of 400 mg. per cent or more, of all the serum lipids. Furthermore, wide hourly variations are known to occur, not to mention seasonal variations and laboratory sources of error. Lipids of perhaps greater significance are lipalbumin, beta-lipoproteins as well as beta/lipalbumin ratios and beta/alpha ratios as determined by paper electrophoresis.

To emphasize further the poor correlation between serum cholesterol levels and atherosclerosis and, perhaps, to de-emphasize some of the claims made for drugs and diets, I cite an article by McCullagh which appeared in the *New England Journal of Medicine* for Sept. 22, 1960.[1] This author compared two groups of Trappist monks with a similar age group from the general population of Cleveland, Ohio. He called attention to the fact that Trappists lead a contemplative life in silence; eat no meat, fish, fowl, eggs, almost no butter, and very little cheese. Their day begins with choir and religious services at 2 a.m.; they have breakfast at 5:30 a.m.; work in the fields or attend classes from 7:45 a.m. to 10:45 a.m.; eat their dinner at 11:30 a.m.; return to their afternoon work at 1:30 p.m. through 3:30 p.m.; eat supper at 5:15 p.m. and retire at 7:00 p.m. Their diet is low in fat from entry to death. They live a peaceful life and have regular daily exercise. Their total caloric intake ranges from 2070-2470 with 36 gm. of butter-fat daily. While it was found that the average serum cholesterol level of the monks was considerably lower than that of the Cleveland group of men, there was no difference whatsoever in cardiovascular degenerative changes.

From my own personal experience, I have had three patients with documented acute myocardial infarction in the past three months who have been on MER/29 and in whom there were statistically significant drops in serum cholesterol level. One of these patients died from his acute myocardial infarction and was found at autopsy to have extensive coronary artery atherosclerosis with a recent thrombus in the right coronary artery.

Certain side effects have appeared in some of the patients for whom I have prescribed MER/29. These have included loss of libido, one instance of balding in a female, and a case of worrisome dermatitis of the soles of the feet after prolonged therapy. These side effects have been reversible. It is also known that the use of MER/29 in patients who are on oral anticoagulant therapy results in a need for larger doses of anticoagulant

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From the Department of Medicine, University of Mississippi School of Medicine.

Read before the regular meeting of the Central Medical Society, Jackson, May 2, 1961.

SYMPOSIUM:

Therapeutic Agents in Hypercholesteremia

F. EARL FYKE JR., M.D.
Jackson, Mississippi

A VARIETY OF FACTORS and agents have been shown to affect the serum cholesterol level in experimental animals and in man. It remains to be seen whether these agents will effect the course of atherosclerotic disease in man, which of course, is the practical question to be answered.

Diet has assumed an important perspective based upon sound scientific reasoning since the female of the species first made diet a household word in her attempt to maintain youthful proportions. The importance of beta-lipoproteins in the pathogenesis of atherosclerosis is difficult to deny, and the influence of diet upon the beta-lipoprotein content of the blood is well established. For the sake of simplicity we will talk primarily in terms of serum cholesterol rather than lipoproteins, henceforth.

From a therapeutic standpoint, diet is important in two parameters as concerns atherosclerosis. First, to maintain a normal weight, which within itself influences cholesterol levels, and second, to supply constituents which reduce cholesterol levels while limiting constituents which directly add to the cholesterol pool. There is mounting evidence that poly-unsaturated fats (practically, linoleic and linolenic acid) promote the elimination of free cholesterol from the liver as neutral sterol and bile acids. This is reflected by a drop in serum cholesterol as well as a change in the density of beta-lipoprotein.

The introduction of the safflower oil preparations and administration of corn oil products created the paradox of administering approximately 500 extra calories to supply a therapeutically effective "dose" of unsaturated fat. Time has brought about the more sensible approach of substituting isocaloric quantities of palatable unsaturated fat for the hard, saturated fats of the dinner table. The substitution of corn oils and other vegetable oils (not hydrogenated) as dressings for salad and as margarines constitute the first steps in this direction. It is important to understand that simple weight reduction is not an effective means of lowering cholesterol permanently and that continued use of poly-unsaturated fats in the diet are necessary if the dietary factors are to be expected to influence cholesterol levels.

In passing it should be emphasized that while the proprietary unsaturated fats marketed under the names of Linodoxine, Arcofac, and Lufa are largely giving way to other therapeutic agents, the rationale which prompted their use is now being incorporated in the dietary program.

MER-29

The introduction in June 1960 of a cholesterol lowering factor known as triparanol or MER-29 heralded the first practical step toward blocking cholesterol formation at a point in the metabolic pathway which is apparently not harmful to the organism. Studies to date indicate that MER-29 is relatively nontoxic, that it does not materially alter the hormonal picture within the body (with the exception of decreasing adrenal response to ACTH) and that it lowers cholesterol levels in serum, liver, and other tissues. Approximately 80 per cent of individuals with elevated cholesterol levels respond with a significant lowering. There is a tendency for some to rebound after a few weeks to a few months back to elevated levels. Side effects of gastric irritation, nausea, headache, and skin rash have been few. As with most entirely new medications subjected to widespread clinical trial there have been glowing reports of subjective improvements such as "sense of well being," decrease in anginal pain and increased ex-

From the Department of Medicine, University of Mississippi School of Medicine.
Read before the regular meeting of the Central Medical Society, Jackson, May 2, 1961.

ercise tolerance in peripheral vascular disease. There are fairly well substantiated reports of decrease in cholesterol deposits in skin and ocular fundi. Contrary to animal experimentation, a dose of MER-29 in excess of 250 mg. (1 capsule) daily does not significantly increase its effectiveness (except in those with liver disease).

NIACIN

The administration of large doses of nicotinic acid (also 3-pyridineacetic acid, aluminum nicotinate) does reduce cholesterol levels, possibly by diverting CoEnzyne A from cholesterol synthesis to conjugation of nicotinuric acid from nicotinic acid. Recent reports indicate that the effect of Niacin and MER-29 are additive. The side effects of nicotinic acid in the large doses necessary make it undesirable. There have also been reports of altered liver function tests.

THYROID MOIETIES

The knowledge that myxedematous patients exhibit marked elevations of serum cholesterol, and that appropriate treatment affects a significant reduction in cholesterol levels suggests the possible beneficial effect of thyroid substances in hypercholesterolemia of nonthyroid origin. The administration of thyroid extract in sufficient quantity to depress cholesterol levels in euthyroid persons causes unpleasant and even dangerous elevation of metabolic rate. The search for portions of the thyroid substance which might alter cholesterol levels with minimal metabolic stimulation have led to the use of dextrothyroxine, d-tri-iodothyronine, tri-, and more recently diiodothyroacetic acid, and tetraiodothyroformic acid or T4F. Early results with these agents indicate a cholesterol lowering effect, more pronounced and predictable in hypothyroid subjects, but to some degree effective in euthyroid subjects. The use of any agent capable of increasing metabolism must be used with caution in patients with known coronary disease. A definite increase in anginal pain has been noted in a high percentage of patients placed on these agents despite attempts to adhere to dosage schedules designed to lower cholesterol levels without significantly altering the metabolic rate.

SUMMARY

1. Current knowledge indicates that it is advisable to maintain a normal serum cholesterol level.

2. Dietary factors which aid in maintaining a normal weight and in providing the major portion of fat calories as poly-unsaturated fats seems advisable toward this end.

3. If necessary, other agents which lower serum cholesterol may be added to the therapeutic program of persons suffering from or predisposed to atherosclerotic disease. At present MER-29 is the most effective and acceptable agent. ★★★

746 Manship Street

Symposium on Cholesterol: Pathogenic Implications

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drugs because of a tendency for the prothrombin time to be shortened. The cause of this remains unknown.

In conclusion, although most of us would be willing to accept the evidence that abnormally high cholesterol levels do accelerate the progress of cardiovascular degeneration, it does not follow necessarily that diets unusually low in animal fat are beneficial in the average person with serum cholesterol levels in the nonsignificant range. It would, likewise, appear that agents which lower serum cholesterol will not prevent atherosclerosis or cardiovascular accidents. ★★★

1151 North State Street

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Symposium on Cholesterol: Metabolism and Utilization

(Continued from page 508)

every tissue of the body, including the walls of arteries themselves, and that cholesterol is an extremely important substance in the metabolic economy of the body. Presently investigation is directed largely to the process of synthesis itself, characterization of the specific steps involved, nature of the intermediate compounds and their pathogenicity, and the biochemical mechanisms at work.

The attention of the clinician has been attracted to this aspect of the problem in the past year by the appearance on the market of triparanol, a substance capable of interfering with the synthesis of cholesterol late in the process and resulting in the recognition of a precursor, 24-dehydrocholes-

terol or desmosterol, which is presently the subject of much investigation.

EXOGENOUS CHOLESTEROL

The daily diet of the average adult American contains somewhere between 500 and 800 mg. of cholesterol. Absorption of this is facilitated by fats in the diet and lessened by "roughage" and phytosterols. Cholesterol, being a lipid, is not soluble in water. Having been absorbed, it is transported to the liver where it is conjugated with proteins to form a lipoprotein complex which is soluble and in which form cholesterol exists in the body.

EXCRETION

Exact figures vary and studies continue,[2, 3] but it is generally agreed that most of the body's cholesterol is excreted in the form of bile acids, perhaps 90 per cent or more, and that there is some enterohepatic circulation of these so that only a very small amount is lost via the feces as either cholesterol itself or coprosterol. A minute amount is excreted via the urine and some, of course, is utilized as a building block for hormones, in the myelin sheaths of nerve fibers, in the epidermis where it contributes to the protective function of the skin, and other areas. Cholesterol is the major sterol present in the tissues of mammals and is probably a constituent of all animal cells.

SUMMARY

The specific pertinence to atherogenesis of cholesterol and its metabolism is a very speculative subject. There is every reason to believe, though, that the answer to the problem involves an understanding of lipoprotein synthesis and utilization and studies of cholesterol are contributing rapidly to knowledge of this larger subject. ★★★

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'FINGERED' FATHERS

Fingerprints are the best evidence of paternity, according to Dr. Sandor Okros of Budapest reporting to the International Academy of Legal Medicine in Vienna. Dr. Okros says that it is not the fingerprint itself, but the minutiae of the prints—the pattern of spots on the prints rather than the contours—which makes it possible to tell if a man is the father of a child. Dr. Okros found, after a 14-year study involving 1,000 families, that lack of such conformity absolutely excluded the possibility of paternity.

SPECIAL ARTICLE

Gynecology and the Law: Five Potential Pitfalls?

By ROWLAND B. KENNEDY

Jackson, Mississippi

Although the gynecologist is not necessarily exposed to liability for malpractice to any substantially greater extent than other medical specialists, he is perhaps more acutely aware of the delicacy of his professional labors. Five areas in particular—sterilization, abortion, artificial insemination, the physician-patient relationship, and the patient's right of privacy—present misendeavor possibilities. Cervantes in 1615 wrote "fore-warned, fore-armed," and in this same sentiment the following material is presented for the benefit of state physicians practicing gynecology.

THE PRACTICE OF MEDICINE has become inextricably bound up in the law. The healer's privilege to practice his art is granted by statute. Certain rights of patient and physician are respectively secured under written and case law as well as the unique relationship between the two. And while the law usually avoids precise and specific definition of medical practice procedures, it seldom fails to erect sufficient generalities by which the standards and skills of the professional community may be fairly judged. Indirectly, the physician has become the tribunal before which he must account because he is obligated to exercise the same degree of ordinary knowledge, skill, and diligence in the care of his patients as prevails in his immediate area of practice residence.

The field of gynecology is especially sensitive to legalistic demand because of its scientific concern with human procreation and cultural orientation among the more delicate of social mores. Although the gynecologist is not necessarily exposed to liability for malpractice to any substantially greater extent than his colleagues in other specialties, he is perhaps more acutely aware of the delicacy of his professional labors than those not so engaged. To demonstrate this thesis, consider, for example, five areas of medicolegal interest to this specialist: the physician-patient relationship, sterilization and surgery, abortion, the right of the patient to privacy, and artificial insemination.

The physician-patient relationship begins when the doctor, in response to an express or implied request, undertakes the task of rendering medical care. He does so of his own volition professionally because the *Principles of Medical Ethics of the American Medical Association* state that ". . . a physician may choose whom he will serve," adding the qualification that ". . . in an emergency, however, he should render service to the best of his ability." But legally, the courts have ruled that the doctor may arbitrarily refuse to accept care of a patient, even though no other physician is available.

When the provider-recipient relationship has been entered upon, legal and ethical obligations are incurred by the physician who, in the absence of specific agreement, should attend the patient as long as his services are required, unless he is sooner discharged or withdraws after giving adequate notice. A doctor may not withdraw his services and relieve himself of liability by simply

Executive Secretary, Mississippi State Medical Association.

Read as a lecture before the Department of Obstetrics and Gynecology, University of Mississippi School of Medicine, June 2, 1961.

staying away from the patient. When stating his intention to withdraw, he should be aware that reasonable and adequate notice is determined by the circumstances of the case, the condition of the patient, and the availability of other physicians.

Should the doctor be discharged by the patient who, in the opinion of the former, requires further medical attention, a potentially explosive professional liability situation may develop. The doctor should act without delay to establish that he did not abandon his responsibilities but was discharged. He should exercise the same precaution with similar dispatch when a patient goes against medical advice to the extent that the case may be aggravated or significant harm done. This protection is best obtained by securing a signed statement from the patient or by sending the patient a registered letter confirming the circumstances, retaining a permanent file copy and the return registry receipt.

A SUBSTITUTE AT DELIVERY

In obstetrical practice, a substitute for the attending physician at the time of delivery is sometimes required. The courts have held that such a substitution may be made. The attending physician is obligated to furnish a substitute who is qualified and competent. Because of the added delicacy of the physician-patient relationship in such cases, it is desirable to secure written consent of the patient to make the substitution, if it becomes necessary.

In providing a substitute in an obstetrical case, however urgent the circumstances, the physician is not necessarily relieved of his obligation to send a qualified stand-in. One case documents how a physician, when called by an obstetrical patient, sent his wife, a registered nurse, while he made another call. The delivery was accomplished before the doctor could arrive and the wife-nurse prescribed and administered medicines. Subsequently, she was prosecuted in criminal proceedings for the unlicensed practice of medicine. The court held that she did only what she was qualified to do and did not undertake care beyond the period of emergency.

EXCEPTIONAL DECISION

Since there is no record in this case of untoward result from the delivery, the case may be said to have had a happy outcome but the legal authorities regard such decisions as exceptions. Where it can be shown that an unqualified substitute had sufficient time to secure the services of a licensed physician, an emergency may not be demonstrable and the legally unqualified substitute would be guilty of unlicensed practice. More than likely, the regular physician would be civilly liable, too.

LEGAL BASIS FOR SURGERY

The medicolegal basis for all surgical intervention, except for emergencies, is lawful consent by or on behalf of the patient. In gynecologic practice, consent assumes a legal meaning of the highest significance when surgery upon the reproductive system is contemplated. It has been repeatedly held by the courts that a physician who performs surgery without authority commits an assault and battery for which he may be prosecuted criminally or held civilly liable in damages. Even though the patient may be able to prove no actual damage or impairment from the surgery, the physician is exposed to the hazard of trial by blackboard and demonstrative evidence designed to produce a substantial judgment for pain and suffering. And sterilization procedures raise additional questions.

STERILIZATION PROCEDURES

There are profound differences of scientific and legal opinion with respect to benefits as well as civil and criminal liabilities arising out of performance of sterilization procedures.

In a recent study, the Council on Medical Service of the Mississippi State Medical Association reported that early employment of sterilization procedures related to eugenic reasons, first advanced in 1883 by Sir Francis Galton. The term "eugenics," derived from the Greek meaning "well born," was employed by Galton who defined it as the study of agencies under social control that may improve or impair future generations either physically or mentally.

About 1904, laws of heredity formulated by the Austrian monk, Gregory Mendel, were rediscovered after having been apparently forgotten since publication 40 years previously. Although Mendel's studies were confined to plant life, they were interpreted as being applicable to human beings.

In the usual sense, operations intended to produce sterility are performed for four reasons: eugenic, genetic, therapeutic, and nontherapeutic. The first three are advocated for the conservation of life, health, or well-being or to serve the public interest where the latter has a statutory basis.

There are 29 states with statutes providing for sterilization of persons deemed to be socially inadequate among whom are the feebleminded, insane, epileptic, habitually criminal, and morally degenerate. Of these, 26 are compulsory. In 1928, the Mississippi legislature passed a Sex Sterilization Act providing for involuntary sterilization of the mentally ill, mentally deficient, and epileptics. It is based upon the premise that the person to be sterilized is a probable potential parent of socially inadequate offspring which would be likewise afflicted.

Genetic conditions and other static, incurable, or transmissible diseases which, of natural course, would for the reason of prevention of adding to the general population the burden of defectives or become the proximate cause of death or disability of the mother are further bases for sterilization. Third, any disease condition, not sufficiently amenable to definitive treatment, which would be aggravated by pregnancy may be considered a medical indication for therapeutic sterilization.

LAW NOT SETTLED

Attorneys for the American Medical Association are of the opinion that ". . . the law is still not settled (as to) the question of the physician's liability for the performance of an operation to produce sterility in the absence of therapeutic necessity. . . . In any case, the physician, before proceeding with any operation that will produce sterility, should obtain from the patient or her parent and from the spouse of a married patient written consent in a form that shows the patient or parent and the spouse have consented with full knowledge of the purpose of the operation and its effects."

The Mississippi State Medical Association has stated that ". . . in arriving at decisions to perform such (sterilization) procedures for whatever reason, physicians and hospitals are cautioned that grave legal implications are involved."

VALID CONSENT

Even with written consent, the physician's legal concerns in performing sterilization procedures do not evaporate. For example, valid consent is no defense in an action for professional negligence. In all cases, the consent—whether express or implied by written or oral means—must be an informed consent with understanding of the procedure to be undertaken and the probable risks involved. Generally, consent is invalid when the act consented to is unlawful, when given by one who has no legal right to give it, and when it is obtained by misrepresentation or fraud. The legal authorities further state that valid consent must be the rational act of a qualified mind.

27 TEST CASES

The legal literature discloses that the question of nontherapeutic sterilization has been tested in the courts only 27 times in the history of American jurisprudence. In 1960, a California state superior court upheld as legal nontherapeutic sterilization but the attorney general contended that ". . . it is a crime of mayhem for which consent is no defense." Other legal authorities compound these differences of opinion by pointing out that malice must be proved to establish mayhem while others reply that malice need not mean malevolence or evil intent but merely the deliberate act of doing what the law forbids.

This continuing debate of opinion without extensive precedent suggests a return to the concept of prevailing standards, skills, and practices of the local professional community. Basically, this was the policy approach of the Mississippi State Medical Association in affirming that decisions to permit or prohibit nontherapeutic sterilization should be made at the local level, cautioning that ". . . such decisions should conform to local attitudes and opinion within the bounds of a high level of ethical conduct by all concerned . . ." and that ". . . where such surgical procedures are approved and accepted under stated conditions, individual physicians should be completely at liberty to decline any or all such requests according to their freely exercised professional judgment and personal convictions."

HOSPITAL POLICIES

Many hospitals, foreseeing requests by patients for nontherapeutic sterilization, have adopted policy procedures under which such applications are reviewed by a committee of the professional staff to determine if locally established criteria are sufficiently met to warrant the operation. Still other hospitals prohibit nontherapeutic sterilization altogether either as a result of decisions by the professional staff or the governing body of the institution.

Nontherapeutic abortion is usually a criminal offense and the law in Mississippi is specific and strict in this connection. Because of deep concern by the medical profession over criminal abortions, the Mississippi State Medical Association sponsored and caused introduction of this law in the 1952 regular session of the state legislature. It

was passed by both houses with only a single dissenting vote. Under its provisions, any person procuring, aiding, or abetting such a procedure may be prosecuted for commission of a felony and if the patient dies, the prosecution may be for murder.

Abortion is not a crime, of course, when performed for therapeutic reasons deemed necessary to conserve health or life of the patient. The same Mississippi statute which prohibits nontherapeutic abortion also provides the necessary remedy for performing the procedure for medical reasons by simply requiring written consultation by two reputable licensed physicians. Similar requirements are made by statute in New Hampshire and Ohio and by case law in Idaho. The Law Department of the American Medical Association advises written consultation by three physicians in the absence of such legal authority.

RIGHT TO PRIVACY

The gynecologist has reason to be concerned over the recent trend among the courts to provide a remedy, in the form of an action in tort, for violation of an individual's right to privacy. People have the right to be left alone, as it were, and not be subjected to unwarranted and unwanted publicity with attendant shame, mortification, and humiliation. In addition to such legal restrictions against his invading a patient's privacy, the physician is further restrained by his self-imposed system of ethics.

Section 9 of the *Principles* states that ". . . A physician may not reveal the confidences entrusted to him in the course of medical attendance, or the deficiencies he may observe in the character of patients, unless he is required to do so by law or unless it becomes necessary in order to protect the welfare of the individual or of the community."

NONESSENTIAL PERSONS

When a patient disrobes for a gynecologic examination, she does so for the professional benefit of the physician and does not expect to be subjected to examination by other persons, medical or nonmedical, who are not necessary in the accomplishment of the medical procedure. Admission of nonessential persons to the view of such treatment or procedures has long been held by the courts as invasion of privacy. In 1881, a Michigan physician admitted a young man who was not a physician to a woman's confinement and the act was held to be actionable.

MAKING OF PHOTOGRAPHS

The unauthorized making of photographs of a patient, even though they are not published, can become a basis for civil action. One of the most frequent violations of privacy upheld by the courts is unauthorized use of such photographs. It is immaterial that the patient's condition is made public because it is newsworthy and in the interest of the public. Similarly, it is no defense against suit for damages that unessential persons are permitted to observe the patient or pictures of the patient for purposes of advancing medical education or science. Those having responsibilities in medical journalism are acutely aware that a copyrighted journal is patently in the public domain. For this reason, the gynecologist and other authors may sometimes think the medical editor excessively exacting in his insistence upon written permission before publishing some scientific illustrations.

In addition to having the right of privacy respected by the physician and his essential assistants, the patient has the concomitant right at all times to decent, respectful treatment.

ARTIFICIAL INSEMINATION

Little assurance concerning the medicolegal aspects of artificial insemination can be given the gynecologist because no case of this nature has ever been decided by a court of appellate jurisdiction in the United States. If the medical literature can be believed, physicians are receiving an increasing number of requests to perform—and are performing—artificial insemination procedures. This professional act raises complex questions upon which much has been written as opinion. Physicians and attorneys are seeking answers as to the legal effect, if any, of AI upon the marital relationship, legitimacy, inheritance, and liability.

There is agreement among legal authorities that AIH, artificial insemination homologous, where the semen of the patient's husband is used, raises few if any legal questions. In one of the three cases where this issue has been in litigation, the court held that AIH ". . . is not contrary to public policy and good morals and does not present any difficulty from the legal point of view." Any child resulting from AIH is unquestionably legitimate and possesses rights of inheritance. The authorities believe that laws relating to professional liability are sufficient to protect the

rights of all parties concerned. It is further believed that if the physician has exercised due diligence, ordinary knowledge and skill, his best professional judgment, and has respected the confidence of the patient, he will probably not be liable for damages even though the resulting baby is born defective.

DONOR SELECTION

Unhappily, the practice of AID, artificial insemination donor or AI heterologous, gives rise to serious legal considerations. When semen from a donor other than the husband is used, the physician assumes some degree of responsibility for the suitability, fitness, and freedom from transmissible disease of the donor. This degree of responsibility is not clear since no law states what is required of a physician in donor selection or whether he is liable for error in judgment or not in making it.

To what extent the courts may recognize the right of the woman to be artificially inseminated or of her husband to assume the risks of unsatisfactory results, even by express written consent, is impossible to state. A patient may, by such consent, relieve a physician of some but not all liability, as has been demonstrated in dissimilar instances. Where AID is performed with adequate consent of all concerned under circumstances of medical privacy, there is little reason to believe that statutes pertaining to rape and adultery shall have been violated since criminal law is strictly construed. Some authorities believe that the procedure constitutes civil adultery, raising questions as to inheritance based upon doctrines of "lawful issue of his body" and "heirs of his blood."

ORFORD V. ORFORD

One of the three cases was before a Canadian court and it tended to substantiate this contention. In *Orford v. Orford,* decided in 1921, there was a question of alleged artificial insemination having been performed upon a woman in England whose husband was, at the time, in Toronto. Although the question was not clearly answered, the court inferred that a woman who submits to artificial insemination without the consent of her husband and where the donor is one other than her husband has committed civil adultery.

The second case, *Strnad v. Strnad,* arose in New York in 1947. In this case, the court had previously granted a decree of separation to a wife and had authorized her husband to have weekend custody of a child born to the wife. She subsequently sought an amendment to the decree on the ground that the child resulted from AID and that the husband was not the father.

The court held that the husband was entitled to visitation rights because ". . . the child has been potentially adopted or semi-adopted by the defendant" who was held to have the same rights as a foster parent. Further, the court declared that the child was legitimate, assuming that the mother was artificially inseminated with knowledge of the husband and that the situation ". . . is no different from that of a child born out of wedlock who by law is made legitimate on the marriage of the interested parties." But the court disclaimed jurisdiction to rule on property rights and thereby left unanswered a major question.

DOORNBOS V. DOORNBOS

The third and apparently most important case arose in Cook County, Illinois, in 1955 during a divorce action. In *Doornbos v. Doornbos,* the plaintiff, one Mary Doornbos, petitioned the court for a declaratory judgment as to whether artificial insemination constitutes adultery, whether it is contrary to public policy, and whether a child of AID is legitimate and the child of the mother only. The court made this ruling:

"Heterologous artificial insemination with or without the consent of the husband is contrary to public policy and good morals and constitutes adultery on the part of the mother. A child so conceived is not a child born in wedlock and (is) therefore illegitimate. As such, it is the child of the mother and the father has no right or interest in said child."

The American Medical Association has commented that this view represents the first decision of any court of record in the United States in point. It represents further the first case in which testimony was adduced during a hearing that (1) medical tests had been made to determine the sterility of the husband, (2) the artificial insemination procedure was performed by a doctor of medicine, and (3) there was consent to the procedure by the mother and her husband. A sufficient precedent was not, however, established because the appellate court dismissed an appeal filed at the request of the trial judge on the ground that it was made from the divorce only. Thus, the courts have remained silent on the major questions involved.

A distinct difference of legal opinion exists on these major questions. While problems of legitimacy and inheritance are those of parents and not of physicians, the latter engage in a professional act believed fraught with hazard. Where

AID is undertaken, the gynecologist is advised to obtain written consent from both the patient and her husband as well as the donor who should be anonymous to all except the physician. Where the donor is married, consent from his wife is desirable, although possibility of suit by her is remote. Finally, the physician should obtain consent to use his own best judgment in selecting the donor.

Additional precautions by the physician include determining, to his own satisfaction, that the husband is sterile from a medical viewpoint. Where possible, the donor's semen should be pooled with that of the husband. Use of pooled semen would give rise to the legal possibility that the husband was the father or, at least, make it more difficult to prove that he was not the father where the donor is of the same blood group. It is emphasized, however, that all such precautions merely bear upon civil liability because neither courts nor legislatures have defined criminal liability in AID.

And a final note of caution: no paper, however documented and authoritative, can possibly serve in place of competent legal counsel. Any practicing physician is wise, indeed, to select and consult an attorney of his choice on all medicolegal aspects of his professional endeavors. ★★★

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PDR OR PDQ?

These imaginary preparations for the more exotic neuroses will never be found in *New and Non-Official Remedies* and, more than likely, a certain senate sub-committee will have difficulty in assigning them generic designations:

Metropal—a potent psychomotor agent for urbanites who have difficulty making friends.

Darnyoual—new anti-inhibition preparation which helps introverts release hostilities.

Kleptomycin—subtle stimulator for persons afraid to steal.

Endital—new, one-capsule overdose of barbiturate.

Thanxamil—semi-analgesic to overcome pain of being able to say goodnight and depart gracefully.

Book Reviews

Cardiovascular Dynamics. By Robert F. Rushmer, M.D., professor of physiology and biophysics, University of Washington Medical School. Second edition, 503 pages. Philadelphia: W. B. Saunders Company, 1961. $12.50.

This is the second edition of Dr. Rushmer's book, first published in 1955 under the title, *Cardiac Diagnosis, a Physiologic Approach.* There has been considerable rearrangement of the text, with some valuable additions, and the new title seems more appropriate. The work is designed as a vertical text, presenting basic cardiac and cardiovascular function, and the significant alterations encountered in disease. The clear style of the book reveals the well-known ability of the author as a teacher. Many diagrammatic illustrations are used; they are very well conceived, and the reproductions are excellent.

The interweaving of clinical and physiologic material is well handled, but neither discipline is covered with any degree of completeness. Indeed, the book is a text and not a reference manual. The bibliography at the end of each chapter is adequate, and well chosen.

Unfortunately, as is often the case with many good things, the price puts it out of reach of the ones who would profit most by it, namely students and house officers.

J. Manning Hudson, M.D.

Relief of Symptoms. By Walter Modell, M.D., director of clinical pharmacology and associate professor of pharmacology, Cornell University Medical College, New York. Second edition, 374 pages. St. Louis: C. V. Mosby Company, 1961. $11.50.

This is one of the few books that I have ever seen that is devoted entirely to the relief of symptoms that sick people present to the physician. This whole idea would seem to be somewhat at variance with standard medical teaching, but as presented by the author is not that at all, and as he himself says, represents better practice when well controlled.

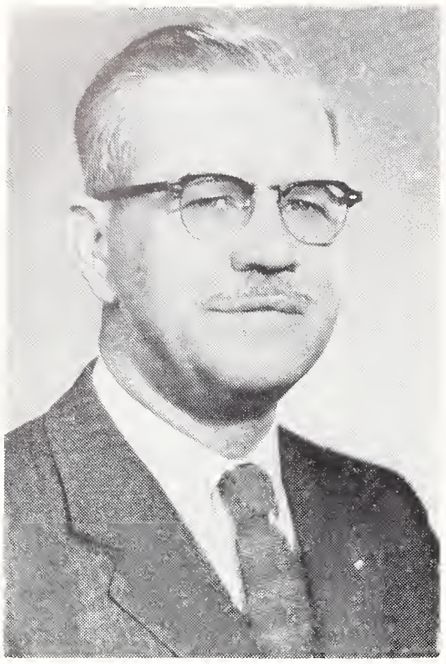
The book is generally divided into three parts, the first part entitled "Theory." The first three chapters in this section seem somewhat repetitive and in some ways more than necessary defense of the book. At any rate they go much deeper into the background of treatment than is usually taught. The fourth chapter, "The General Use of Drugs in the Relief of Symptoms," is quite revealing.

Part II is entitled, "Practice" and there follow 27 chapters discussing 27 symptoms which the author believes includes well over 95 per cent of those symptoms which bring patients to a doctor's office. These discussions include a brief clinical background as well as a discussion of treatment.

Part III is entitled, "Counsel," and includes a lone but important chapter on "Cortisone and the Masking of Symptoms." This is a very timely chapter filled with much common sense information about the gluco-corticoids, their use, and misuse. In addition, scattered throughout the book are 24 tables which list drugs useful in the treatment of the symptoms discussed, according to the individual classes of drugs. The listings are by both generic and trade names and constitute an extremely useful bit of information, which in this new edition is quite up to date.

This then is a new second edition of a book devoted to the detailed discussion of the relief of symptoms, which includes background reasoning for this concept as well as up to date, remarkably well condensed discussions of clinical syndromes and treatment. The author is a skilled clinician and therapeutist with great experience in this field. Its most effective use will be by physicians whose primary interest is accurate diagnosis followed by eradication of the cause, where possible, but who recognize that relief of symptoms represents a significant part of what modern medicine has to offer. It will serve least those physicians who simply thumb its pages looking for remedies.

James R. Cavett, M.D.



The President Speaking

'The High Shelf'

LAWRENCE W. LONG, M.D.
Jackson, Mississippi

IN INDICES TO THE LITERATURE, the listing, "Poisoning, accidental," is usually prominent with a lengthy listing of references to original papers, statistical reports, editorials, and clinical notes. Few subjects occupy more space in our journals and texts—and to less avail, it might be added. Accidental ingestion of drugs, household preparations, industrial agents, solids, liquids, pills, and capsules are provable mathematically in the deadly equation stating that one human being *divided* by curiosity, carelessness, or ignorance *times* opportunity *equals* disaster.

It's bad enough when a perfectly rational adult experiences temporary discomfort resulting from ingestion of an inedible substance. It happens every day and, at one time or another, to most of us. The danger is in the pattern which appears to demonstrate that most never really learn. But the child's experience is doubly serious because more often than not, it can spell tragedy. Many in all areas of medical practice and especially our colleagues in pediatrics are acutely aware of the potential emergency which every living child represents.

Many years ago, a news article recounted how a pediatrician impressed his patients' parents at no expense of extra time. On a shelf safely out of youngsters' reach, he had a strange display in his reception room. There were a couple of half-open prescription bottles, a container of household ammonia, a box of detergent, a few kitchen matches, and a jar of silver polish. There was neither identification nor descriptive legend.

Many a mother was reputed to have said of the exhibit, "Why, what you have there is enough to kill every child you've treated this year." His reply was always the same: "Exactly, but it's on a high shelf—not on the bathroom floor or in a low cabinet." They got the point.

In this issue of your JOURNAL MSMA, the problem of salicylate intoxication is well presented. Just such a paper reminds us all of the thoughtless parent who tells the child that flavored aspirin is candy. Many doctors have seen such children later under emergency circumstances.

This overall, important ounce of prevention seems worth our thought and effort. ★★★

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EDITORIALS

Halstead: Giant of Surgery

I

William Stewart Halstead, a curious paradox of the stern and kindly, lost and saved, eccentric and logical, is a likely candidate for history's acclaim as the outstanding physician of the 20th century. Indeed, so profound is his influence upon modern surgery that at best, he is its father and at least, it has proceeded to its present high status of scientific advancement under his imprimatur.

Halstead was always in a class by himself. He permitted nothing to interfere with his work as a surgeon, a life-long endeavor he pursued with a devotion bordering on fanaticism. His genius was characterized by imagination, logically exercised and prudently—if sometimes unexpectedly—implemented. He had a passion for perfection which extended from professional to personal life. In the drawing room, Halstead was a dandy; at the patient's bedside, a merciful angel; in the operating room, an unhurried authoritarian—but in every instance justified in the eyes of his severest critics by unbelievable successes.

During three decades of professional prime, he made better use of Pasteur's and Lister's discoveries than they themselves did. Halstead revolutionized postgraduate medical education while his spiritual mentor, William H. Welch, was drastically revising pre-doctoral educational concepts by organizing the first full-time medical faculty. And it's almost understating the case to dismiss Halstead as the vanguard scientist among those who raised American surgery from a dangerous—however compassionate—last resort of the healer, a hopeful alternative to imminent death, to a certain art and reliable science.

II

Born to a wealthy family in 1852, Halstead received the best medical training available. He was graduated from the Columbia University College of Physicians and Surgeons, interned at Bellevue, and studied two years in Germany and Austria, the then medical capitals of the world. Returning to his native New York to begin practice, he accepted an appointment at Bellevue. He was appalled at the filth and contamination in the operating rooms where aseptic surgical technic was unknown. Unable to obtain an operating suite up to his standards of cleanliness, Halstead performed his surgery in a tent he erected on the hospital grounds.

He was equally fastidious in his grooming, appearance, and personal habits. Halstead affected a pince-nez, sported a large but carefully trimmed mustache over a precise goatee, had his clothing tailored in England, his shirts made to measure in Paris, his hosiery knitted in Scotland, and his shoes fashioned by the best French bootmakers. Distrusting the quality of service in New York and Baltimore, he sent his personal linen to Paris for laundrying. The hickory logs for his library fireplace were custom dried and imported from the mountains of North Carolina. He was 39 years old before permitting himself marital luxury.

In the mid-1880's, some degree of postoperative infection usually showed up in surgical patients. Lister's antiseptic technics seemed less than enough and Halstead wanted to know why. He found that prolonged scrubbing and immersion of the hands in the strongest antiseptic agents were insufficient to remove bacteria. He devised

rubber gloves, reasoning that he could boil them sterile.

The aftercare Halstead gave his patients was no less amazing than the treatment on the operating table. Despite a phenomenally busy schedule, he was kindly and unhurried at the bedside in the wards. Dissatisfied with the hospital's methods for recording postoperative progress, he came up with the now-universal practice of maintaining temperature charts.

III

Halstead's discoveries and development of surgical technic are legend. He administered what was probably the first direct blood tranfusion to his own sister—he was doctor *and* donor—when she experienced a postpartal hemorrhage. She recovered, too. He performed one of the first cholecystostomies on his own mother who survived.

The Halstead herniorrhaphy—devised independently but apparently simultaneously with Bassini in Italy—made inguinal hernia 90 per cent curable by surgical intervention. But best known of all is the Halsted radical mastectomy with a recurrence rate of only six per cent in the first 50 procedures he performed! With a laboratory-developed thyroidectomy technic, Halstead almost single-handedly reduced the procedure's mortality rate from 100 per cent to near zero.

He had a fine loathing for the surgical speed demon and he believed in mustering every iota of professional skill at every procedure, always at the expense of time. Goetsch recalls Dr. Charles Mayo, Sr., in an acid observation of Halstead's meticulous technic: "It was the first time I ever saw the upper end of an incision heal before the lower end was closed."

IV

Early in his professional career, Halstead became a tragic victim of cocaine addiction, a result of self-experimentation with local anesthetic agents. His three year struggle against the drug is the most obscure chapter of his life, half fiction and half fact. Some biographers suggest that he was never cured but research historians working under the sponsorship of E. I. DuPont de Nemours believe he was completely rehabilitated. His former student and admirer, Goetsch, agrees.

Legend has it that the wealthy, competent, polished Halstead, once addicted, dropped out of sight for a year or more, literally becoming a skid row habitué. Supposedly, he turned up in Baltimore, seeking help from his friend, Dr. William H. Welch, the new head of Johns Hopkins University School of Medicine. Welch was said to have taken him into his Cathedral Street home and begun private treatment.

It is a fact that Welch chartered a yacht to take Halstead on a cruise in southern waters and in 1886, he joined the Johns Hopkins medical faculty to begin his most productive era.

The pioneering work of this great university is largely attributable to the Welch-Halstead team. Halstead recovered brilliantly to institute the resident training system, another first, requiring his students to remain with him as long as eight years. Among his protégés were Bloodgood, Cushing, Dandy, Goetsch, Young, and a host of others. Although the last few years of his life were spent in declining health, he worked at his post until his death at age 70 in 1922.

Just how profound was the influence of this American giant of surgery?

Every doctor in the United States and most of the world used a Halstead method, technic, or procedure today.—R.B.K.

OK, GP's!

Within the week, the Mississippi Academy of General Practice conducted its annual meeting at Jackson. Whether he desires it or not, the general practitioner has thus been subjected to public scrutiny and in a finer sense, to professional appraisal by his specialist colleagues. This is, of course, a natural process of events—more good than not for the public, physicians in other than general medicine, and the generalist himself.

The focus of emphasis upon the work of the academy discloses the aims and objectives of this group. As nearly everyone knows, the American Academy of General Practice has as its primary purpose postgraduate medical education with an enlightened self-interest in improving the professional proficiency of the general practitioner. So important is this objective that each academy member bears an inescapable obligation to meet stated postgraduate minimums upon pain of expulsion.

While the academy has no thought of assuming national leadership responsibility in matters of medical socioeconomics, recognizing this unlikely eventuality as being grossly inappropriate, it does maintain a continuing interest in medical education for generalists and it does assume positions on current legislative issues of importance to its members. Happily—and not altogether accidental-

ly—these policy courses coincide with those of official medical organization with remarkable consistency.

Just as the Mississippi State Medical Association sends its good wishes to the specialty disciplines, its official voice speaks this salutation to our general practitioners upon the beginning of another new academy year. To Dr. Tom H. Mitchell, the recently retired president of the Mississippi group, a hearty well done and to Dr. Guy T. Vise, the newly inaugurated president, congratulations and the state association's warm expression of every good wish for continued success.—W.M.D.

Medicine's Language? SAMO Talks It!

Nothing for which the newly organized Southwide Association of Municipal Officials stands should provoke argument from medical organization or physicians. As a matter of fact, some in medicine already hail the movement as a genuine rebirth of grassroots conservatism which has much to offer in protecting the public from government welfarism. On the plus side of the ledger are factors of great encouragement: Leaders who are not identified with liberalism and government give-away and constitutional objectives, seeking, local initiative and private enterprise.

SAMO is the brainchild of Monroe, La., Mayor Jack Howard. In the few brief months since he first espoused its founding, municipal executives of nine southern states have joined in common purpose to counter liberalism in government at state and federal levels. Mayors of 28 Mississippi cities are active members and four, Jackson's Thompson, Hattiesburg's Pittman, Tupelo's Ballard, and Natchez' Watkins, were named to the organization's 42 member board of directors. Addressing the August founding meeting at Memphis, Mayor Allen C. Thompson of Jackson predicted confidently that SAMO ". . . will bring back conservatism to the whole country."

That this new group talks medicine's language is hardly a point for debate. Three of the SAMO constitutional objectives, for example are timely:

"—decentralization of government and (the) bringing back to municipalities not only the right but the responsibility of managing their own affairs.

"—fostering, encouraging, and promoting the American philosophy of free enterprise.

"—seeking and preserving individual freedom and encouraging individual initiative and self-reliance."

Sounds good? Then listen to this: The first order of business at SAMO's initial meeting was an examination of the Newburgh, N. Y. no-work-no-welfare-if-you're-able policy. And that's a good enough beginning.—R.B.K.

NEW MEMBERS

The following physician has been elected to membership by his respective component medical society in the Mississippi State Medical Association and the American Medical Association:

SCULLY, ARMAND JULES MICHEL JR., Mississippi City. Born New Orleans, La., July 5, 1928; M.D. Louisiana State University School of Medicine, New Orleans, 1955; interned Charity Hospital, New Orleans, La.; Orthopaedic Surgery residency Charity Hospital, four years; U. S. Army, two years; elected June 7, 1961, by Coast Counties Medical Society.

PERSONALS

FLETCHER C. BOREN of Mantachie, TOBE M. RIDDELL of Shaw, E. LEROY WILKINS of Clarksdale, STANLEY L. PHARR and WILLIAM A. WATSON of Booneville, were among MSMA members honored by the University of Tennessee Medical Units on Sept. 24 for their half-century of medical service. All received their medical degrees in 1911 from the old Memphis Hospital Medical College, which was consolidated with the University of Tennessee College of Medicine in 1913.

GEORGE GILLESPIE and HOWARD NICHOLS of Jackson served as chairman of the medical unit of the United Givers Fund professional division in the Jackson campaign.

JAMES HADLEY, currently at Greenville Air Force Base, has been employed by the Lee County board of supervisors as county health officer. Dr. Hadley assumed his duties Sept. 15.

JOHN ED HARRIS, a native of Okolona, has opened general practice in his hometown. Dr. Harris received his medical degree from Tulane University School of Medicine and interned at the Medical Center in Columbus, Ga. He has just been

discharged from the Air Force with the rank of captain.

T. G. HUGHES, medical practitioner in Clarksdale for 53 years, retired the last week in August. Dr. Hughes was the doctor for the first Clarksdale High school football team, organizer of the first Coahoma county medical unit, was co-founder of the first Negro hospital for the county, was the first city health officer and was elected the first chief of staff of the Coahoma County Hospital. Dr. Hughes is an emeritus member of MSMA and a member of the Fifty Year Club.

N. C. KNIGHT, medical director of the Mississippi School Health Service, and Shelby Mitchell, director of the Jones County Health Department, were consultants for an August School Health Workshop, sponsored by the State Board of Health, the State Department of Education, and Mississippi Southern College in Hattiesburg. The workshop was held at Mississippi Southern.

THADDEUS S. RODDA of Clarksdale has been named a diplomate of the American Board of Pathology. Dr. Rodda is pathologist at the Coahoma County Hospital.

LOWRY RUSH, JR. of Meridian has been elected president of the Lauderdale County chapter of the University of Mississippi Alumni Association for the coming year.

GUY T. VISE, president of the Mississippi Academy of General Practice, attended the fall meeting of the Commission on Legislation and Public Policy of the American Academy of General Practice. Dr. Vise was recently elected to a three-year term on the 10-man commission.

DEATHS

COOK, FREDERICK MARSHALL, Florence. M.D., National University of Arts and Sciences, St. Louis, Mo., 1914; interned St. Louis Baptist Hospital, Missouri, one year; Board member and Fellow of American Psychiatric Association, member of the American Medical Association; died Aug. 4, 1961, aged 73.

POU, JAMES FRANCIS, Petal. M.D. Tulane University School of Medicine, New Orleans, La., 1905; died Aug. 11, 1961, aged 83.

State Morbidity Reported Through Aug. 25

The Mississippi State Board of Health reports the following occurrence of morbidity for 1961 through Aug. 25.

Tuberculosis, pul.	480
Tuberculosis, O. F.	32
Gas gangrene	2
Salmonella infections	7
Brucellosis	7
Dysentery	
Amebic	22
Bacillary	30
Septicemia, NOS	1
Staphylococcus infection	12
Leptospirosis	1
Diphtheria	5
Typhoid fever	1
Meningococcus infection	
Meningitis	9
Meningococcemia	4
Meningitis, O. F.	80
Tularemia	9
Tetanus	6
Poliomyelitis (P)	6
Encephalitis	
Infectious	40
Postvaccinal	1
Mononucleosis, infectious	77
Generalized vaccinia	1
Toxoplasmosis	3
Puerperal sepsis	2
Diarrhea of newborn	13
Hepatitis, infectious	998
Helminthic infections	
Hookworm	1022
Ascariasis	232
Strongyloides	28
Histoplasmosis	25
Streptococcus infection	
Scarlet fever	164
Strep throat	1391
Rheumatic fever	3
Rheumatic heart	3
Pertussis	35
Measles	1265
Chickenpox	763
Mumps	602
Influenza	637
Chancroid	16
Gonorrhea	4121
Syphilis	
Early	185
Late	182

Dr. Harris Represents MSMA at Nuclear Meet

Dr. Elmer J. Harris, Jackson radiologist, attended the Southwest Seminar on Nuclear Energy in Hot Springs, Ark., Aug. 30-31. As the official representative of the Mississippi State Medical Association, Dr. Harris attended a panel on "Nuclear Medicine."



Dr. Elmer J. Harris, right, talks with Dr. Edward Teller, father of the hydrogen bomb, during the Southwest Seminar on Nuclear Energy. Dr. Harris and several other Mississippians met with the internationally known nuclear physicist during the conference.

One of 15 Mississippians who attended the seminar, Dr. Harris met with Dr. Edward Teller, internationally famed nuclear physicist who is often called the "father of the hydrogen bomb."

Dr. A. D. Suttle, Jr., director of the Mississippi Industrial and Technological Research Commission, said, "I very much appreciate the Mississippi State Medical Association sending an official delegate to the seminar. I appreciate even more that the association saw fit to appoint a man of Dr. Harris's professional stature."

The two-day seminar had as featured speakers Dr. Teller; Dr. Wernher von Braun, director of the Marshall Space Center in Huntsville, Ala.; and Dr. Leland J. Haworth, commissioner of the United States Atomic Energy Commission.

Dr. Harris said, "This conference was of great value in pointing out the increased application of nuclear energy in industry, agriculture, and medicine. Consequently, it is of utmost importance that physicians assume their responsibility in health protective measures."

He said that the panel on "Nuclear Medicine" included such topics as "Radiation Teletherapy and Internal Treatment" and "Radiation Protection and Radiobiology."

The Southwest Nuclear Seminar was sponsored by the Regional Advisory Council on Nuclear Energy and the five states of Oklahoma, Texas, Mississippi, Louisiana, and Arkansas. Cooperating agencies included the U. S. Atomic Energy Committee, the Department of Defense, the National Aeronautics and Space Administration, and the Council of State Governments.

Cosmetics Attract AMA Attention

With the steadily increasing use of cosmetics among American women of all ages, problems relating to cosmetics are becoming more common in medical practice.

In recognition of this factor, the Committee on Cosmetics of the American Medical Association will sponsor a Symposium on Cosmetic Problems in General Practice in conjunction with the annual meeting of the Southern Medical Association on the afternoon of Nov. 8 at Dallas, Texas.

Dr. Stephen Rothman, professor emeritus of dermatology at Argonne Cancer Research Hospital, AEC, the University of Chicago, is chairman of the Committee on Cosmetics and will act as chairman for the Dallas symposium.

Papers to be presented will include:

"Cutaneous Cleansing in Health and Disease," by Dr. Raymond R. Suskind, director of dermatology of the Kettering Laboratory and associated professor in the department of preventive medicine and dermatology of the University of Cincinnati.

"Skin Protection in the Household and on the Job," by Dr. Donald J. Birmingham, medical director of the division of occupational health of the Public Health Service and associate professor of dermatology of the University of Cincinnati.

"Care of the Hair and Nails," by Dr. Albert Kligman, professor of dermatology of the University of Pennsylvania.

"Dermatitis Due to Cosmetics," by Dr. James W. Burks, professor of clinical dermatology at Tulane University.

UMC Alumni, Friends Invited to Nov. Open House

The University of Mississippi Medical Alumni Chapter has scheduled an open house for alumni and friends during the Southern Medical Association meeting in Dallas.

Suite 1906-05 will be open from 5:00 until 7:00 p.m. on Nov. 6 and 7, according to Dr. S. Lamar Bailey, Kosciusko, president of the chapter.

Dr. Bailey, Mrs. Bailey, and C. W. Price, alumni secretary of the Medical Center, will serve as hosts.

All medical alumni and friends of the University are cordially invited to attend.

National Foundation Director Clarifies Patient Aid Policy

National Foundation chapters are still billed occasionally for professional services to polio patients, writes the Foundation's director of medical care in a recent letter to MSMA.

Dr. William S. Clark said that this was not a widespread practice, but was at times a source of embarrassment because current chapter patient aid policies do not authorize payment of professional fees.

Prior to 1959, National Foundation chapters were permitted to reimburse physicians and approximately one-third of the 3100 chapters had been doing so. However, a number of physicians objected to this practice.

These criticisms were expressed in a resolution passed by the AMA House of Delegates in June 1960. In effect, the resolution disapproved the payment of physicians' fees within the judgment of the Executive Committee of National Foundation Chapters.

Foundation studies following this resolution showed that it was not possible to develop a comprehensive and fair fee policy devoid of exercised controls by a substantial number of nonmedical administrators of individual chapters.

Current policy, clarified Dr. Clark, is based on the concept that the high cost of catastrophic illness derives from the numerous services and lengthy hospitalizations for adequate care rather than from medical fees. He said that the Foundation attempts to alleviate the economic burden by giving assistance for the ancillary costs of essential long-term or intensive care.

Dr. Clark also said that the Foundation believes its assistance should be available to all families who might suffer severe economic hardship from chronic disabling diseases. Thus, current policy permits assistance to families of private as well as nonprivate patients without involvement in the traditional patient-physicians relationship, wrote Dr. Clark.

Dr. Clark asked that physicians contact his staff for clarification of policy when necessary. "If modifications of chapter patient aid policies are desirable, such will be given serious consideration," he concluded.

MSMA Leaders Map Out Dynamic Annual Session

MSMA leaders have begun to build the most dynamic annual session in state medical history with the headliner event of the association year seven months away.

The planning begins in the conclaves of the Council on Scientific Assembly, which sets the dates, continues through the section chairmen, who contact the speakers, and comes to rest with the individual MSMA member, who marks the second week in May off his appointment book.

May 8-10, 1962, are the dates this year and the Hotel Heidelberg in Jackson will be the headquarters. The Woman's Auxiliary will meet in the King Edward Hotel.

The schedule, as set up by the Council on Scientific Assembly, is as follows:

Tuesday, May 8	Morning, House of Delegates Afternoon, Sections on Pediatrics and Medicine
Wednesday, May 9	Morning, Symposium Afternoon, Sections on Surgery and EENT
Thursday, May 10	Morning, Sections on General Practice, Obstetrics and Gynecology, and Preventive Medicine Afternoon, House of Delegates

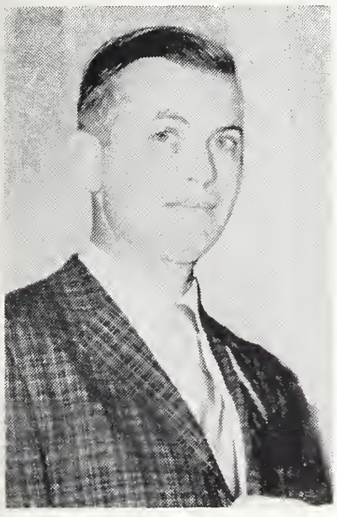
Monday evening, May 7, 1962, has been set aside for the Tulane and Tennessee Alumni functions. The Ole Miss Alumni meeting is scheduled for Tuesday evening, May 8.

Deadline for the program is Feb. 15, 1962, according to Dr. C. G. Sutherland, chairman of the Council on Scientific Assembly. The next meeting of the council will be Jan. 11, 1962, he said.

AMEF 1961 Campaign Gets Underway in State

Dr. W. E. Caldwell of Baldwyn has announced the 1961 winter campaign of the American Medical Education Foundation.

In reminding the membership that the campaign will be conducted primarily at local society-hospital staff level, Dr. Caldwell, state AMEF chairman, said that a representative has been appointed for each component society.



Dr. Caldwell

"Fundamentally, the AMEF is a frank recognition of the serious financial plight which besets our nation's 86 medical schools," Dr. Caldwell said. "Each school absorbs as much as 40 per cent of its parent university's budget while graduating less than 10 per cent of its students. Tuition received from medical students pays scarcely more than one-sixth of their training cost."

Dr. Caldwell said that in entering the 10th year of the AMEF program, medical organization has joined in a working partnership with medical education to place a reliance for necessary additional funds upon private rather than federal sources.

"Each dollar contributed is a positive expression of the physician-donor's concern for this problem," Dr. Caldwell said. "Mississippi physicians have contributed in increasing amounts each year in support of this vital program."

Dr. Lawrence W. Long in commenting upon the work of the state committee and the generosity of the membership in previous years, said that, "Keeping our medical schools free is keeping faith with 180 million Americans, especially those of the next generation."

"Just as no physician desires a federal system of socialized medical care, no doctor of medicine wants federalized medical education, said the MSMA president. In AMEF physicians have a rare opportunity to vote a meaningful "no."

Saunders Company Lists Two Recent Publications

W. B. Saunders Company features the following recent books in their full page advertisement appearing elsewhere in this issue:

DRIPPS, ECKENHOFF AND VANDAM—INTRODUCTION TO ANESTHESIA

An ideal basic guide to the understanding and safe administration of anesthesia.

CORDAY AND IRVING—DISTURBANCES OF HEART RATE, RHYTHM AND CONDUCTION

Covers management of all the cardiac arrythmias and conduction defects.

UMC Adds Three To Medical School Faculty

The University of Mississippi School of Medicine has added three faculty members to its staff for the 1961-62 session.

Dr. Robert D. Currier will serve as associate professor of medicine, Dr. Nell J. Ryan as instructor in pediatrics, and Dr. Harold Birts White, Jr. as assistant professor of biochemistry.

Advancements in academic rank in the School of Medicine include Dr. Jack D. Goodrich from instructor to assistant professor of radiology, Dr. John A. Gronvall from instructor to assistant professor of pathology, Dr. Bernard T. Hickman from assistant professor to associate professor of radiology, Dr. Forrest Hutchison from assistant professor to associate professor of preventive medicine, Dr. Emmett Johnson from assistant professor of biochemistry to associate professor of microbiology, Dr. Don Turner from assistant professor of biochemistry to associate professor of surgery and assistant professor of physiology, Dr. Forrest T. Tutor from instructor to assistant professor of neurosurgery.

A neurologist, Dr. Currier comes to the University Medical Center from the University of Michigan Medical School where he was an associate professor.

Dr. Ryan, the first woman graduate of UMC, is also the first four-year graduate ever to be appointed to the clinical faculty. She will head the new Birth Defects Treatment Center, financed with National Foundation funds.

Dr. White studied at Columbia University in New York, where he earned his B.A., M.A. and Ph.D. degrees. Prior to coming to Mississippi, Dr. White was assistant professor of biochemistry at Purdue.

Miss Russ To Direct State Cancer Division

Miss Lucille Russ, who has been with the Mississippi Division, American Cancer Society since 1949, has been named its acting executive director.

The appointment was made at the Aug. 17 meeting of the Executive Committee, according to Joseph G. McKinnon, division president. Miss Russ assumed her duties Sept. 1.

The new director is a native of Gulfport and received her B.S. degree from Mississippi Southern College. She completed her work for a Master of Science in Public Health degree at the University of North Carolina after studying at both Tulane and Duke Universities.

Before joining the Mississippi Division staff, Miss Russ served as health educator with the Coahoma County Health Department in Clarksdale, and for two years filled the post of rural health specialist with the Florida Agricultural Extension Service.

Prior to being named executive director of the Mississippi Division, Miss Russ served as director of public education.

Dr. Gray Works with National Task Force on Syphilis

Dr. A. L. Gray, state health officer, has been named by Surgeon General Luther L. Terry to a task force on the eradication of syphilis.

The group met in New York City Sept. 13 and its conclusions will form the basis of a special report to the House Appropriations Committee at the next session of Congress.

In studying the Public Health Service budget for the current fiscal year, the Appropriations Committee expressed grave concern over the alarming increase in infectious syphilis. It stated that syphilis is a disease that ought to be eliminated in the United States and that it would expect the Public Health Service to have recommendations for an effective program when the Committee holds its hearings next year.

Serving on the task force with Dr. Gray are Dr. Leona Baumgartner, commissioner of health for New York City; Dr. Arthur C. Curtis, professor and chairman, department of dermatology and syphilogy, University of Michigan Hospital; T. Lefoy Richman, projects coordinator for the National Commission on Community Health Services, New York City, and Benno E. Kuechle, retired insurance executive from Wausau, Wis.

The Surgeon General has asked the group to evaluate present efforts to control syphilis and to recommend "principles and methods that will make it possible to establish a timetable leading to the eradication of syphilis as a public health problem."

Conference To Study Obesity in Teenagers

An exploration into the serious problem of obesity among teenagers will be the subject of a symposium sponsored by the American Medical Association's Council on Foods and Nutrition.

The one-day conference will be held at Stanford University, Stanford, Calif., Saturday, Oct. 21. Co-sponsors include the department of pediatrics of the Stanford School of Medicine, California State Department of Health, California Medical Association, Santa Clara and San Mateo County Medical Societies.

Conference moderator will be Dr. Norman Kretchmer, Stanford University School of Medicine. The dean of the School of Medicine at Stanford, Dr. Robert H. Alway, will deliver opening remarks.

The morning session will deal with fat metabolism and various aspects of weight control. Psychological aspects of overeating and obesity, evaluation of calorie needs, and a panel discussion of the obese adolescent, will conclude the program.

Participants include Drs. Harold Harper, University of California School of Medicine, San Francisco; William Parson, University of Virginia School of Medicine, Charlottesville; Edmund Volkart, Stanford University; Hilde Bruch, Columbia University College of Physicians and Surgeons, New York; Dr. Josef Brozek, Lehigh University, Bethlehem, Pa.

In addition to Drs. Bruch and Volkart, panel participants are Drs. Harry Jennison, Stanford University School of Medicine; Leslie Corsa Jr., California State Department of Public Health, Berkeley; Luigi Luzzatti, Stanford University School of Medicine.

Advance registration may be made with the Council on Foods and Nutrition, American Medical Association, 535 North Dearborn, Chicago 10, Illinois.

AMA Denver Meet Will Explore U. S. Habits

Every physician is well aware that the personal and group habits of his patients in their everyday lives have a profound effect on the health of the individuals.

A group of Denver physicians, plus a colleague from Wyoming, will present a study of medical aspects of American habits as a highlight of the program of the 15th annual clinical meeting of the American Medical Association, Nov. 26-30 at Denver.

William Covode, M.D., of Denver is chairman of the section. The program will include such topics as "The Coffee Break," by E. Chester Ridgway, M.D., Cody, Wyo.; "The Psycho-Stabilizers," by Jack O. Stoffel, M.D.; "Psycho-Sexual Aspects," by Bradford Murphey, M.D.; "The Pet in the House," by Francis T. Candlin, D.V.M.; "Automobile Driving," by Horace E. Campbell, M.D., and "The Cocktail Hour," by Clyde E. Stanfield, M.D.

The Colorado group has been studying the various American habits to be covered in the section for some time, and the program is expected to draw wide interest among the profession.



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"I keep getting a busy signal!"

Chemotherapy in cancer, an area in which knowledge is growing rapidly, will be another important feature of the clinical meeting program.

Subjects in this area will include "A Survey of Chemotherapeutic Agents in Malignancy," "Chemotherapy of Leukemia and Malignant Solid Tumors in Children," "Chemotherapy as an Adjuvant to Cancer Surgery," and "Enhancement of Radiotherapy by Oral Methotrexate."

Delivering papers on chemotherapy in cancer will be S. D. Mills, M.D., of the Mayo Clinic, Rochester, Minn.; Warren H. Cole, M.D., of the University of Illinois, and E. Shanbrom, M.D., of Orange County General Hospital, California. Paul K. Hamilton, M.D., of Denver, will be chairman.

Much new knowledge has been gained in the last decade in the important area of antibodies and antigens. Several papers have been scheduled to report some of the new findings to the clinicians.

Subjects include "Autoimmune Disorders," "Thyroiditis," "Rheumatoid Arthritis" and "Molecular Aspects of Antibody and Production and Specificity." Other topics of interest in the area of antibodies and antigens include "Lupus Erythematosis Cells," "Hepatitis With Associated Lupus Erythematosis," "Insulin Resistance" and "Homografts."

A paper on "Fact and Fancy Regarding Glasses" will be presented by two Denver ophthalmologists, M. Kaplan and George A. Filmer. Duane D. Lahey, M.D., of Denver, will discuss "Indications for Contact Lenses."

Suicide will be analyzed in a section that will be of importance to the clinician to assist him in recognizing symptoms and taking preventive steps among his patients. Topics on this subject will include "Statistics and Public Health Significance," "Causes," and "Prevention."

Ob-Gyn Board Announces Jan. 5 Examinations

The American Board of Obstetrics and Gynecology will conduct its next scheduled examination, Part I, written, on Jan. 5, 1962.

The examination will be held in various cities of the United States, Canada, and military centers outside the continental United States.

Current bulletins may be obtained by writing to Dr. Robert L. Faulkner, executive secretary and treasurer, 2105 Adelbert Road, Cleveland 6, Ohio.

AUXILIARY

Dr. Long Asks Assistance On Important Front

Dr. Lawrence W. Long, MSMA president, asked Auxiliary members for their assistance on several important fronts at the Executive Board's August 30 meeting.

Speaking to 21 state and local Auxiliary officers, Dr. Long asked support for

—MSMA's position, to be outlined, on the future and appropriations of the State Hospital Commission.

—the association's continued disapproval of cultist licensure.

—MSMA's recent approval of licensure of certain paramedical groups, specifically physiotherapists.

—a state pure food and drug law to be presented to the 1962 regular session of the state legislature by the Board of Health.

—a Good Samaritan law, allowing persons to give aid at the scene of an accident without incurring liability. This law will be introduced again at the legislature's 1962 session.

—the Keogh Bill, providing for voluntary, tax-deferred retirement programs for the self-employed.

Dr. Long also reported on the advance planning of the 94th Annual Session which will be held in Jackson May 8-10. Headquarters for the woman's Auxiliary will be the King Edward Hotel, he said.

Mrs. John G. Egger, president, presided over the Board and reported on the June meeting of the Woman's Auxiliary to the American Medical Association to which she was a delegate.

Prior to Dr. Long's address, these committee chairmen gave their reports: Mrs. H. H. McClanahan, Jr., Columbus, legislation; Mrs. L. T. Carl, Jackson, mental health; Mrs. M. S. Riddell, Winona, revisions; Mrs. A. E. Brown, Columbus, AMEF; Mrs. Glen Pearson, Hattiesburg, civil defense; Mrs. W. M. Wood, Carthage, safety; Mrs. William N. Crowson, Clarksdale, public relations; Mrs. Lee R. Reid, yearbook.

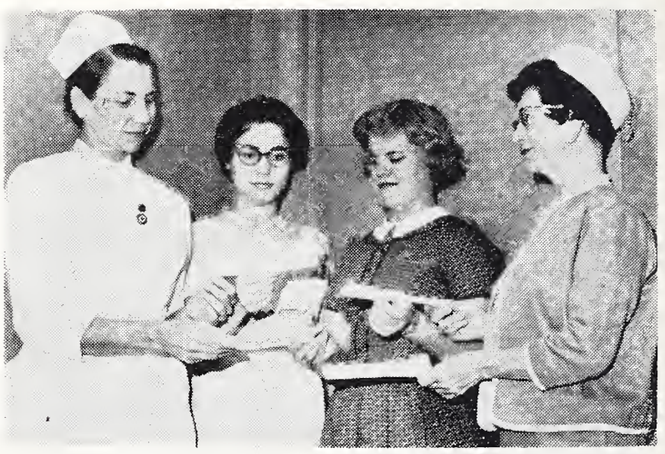
Officers present included Mrs. Egger, Mrs. A. T. Tatum of Hattiesburg, president-elect; Mrs. Wendall Holmes, McComb, recording secretary; Mrs. Byron A. Mayo, Drew, corresponding secretary; Mrs. Lee R. Reid, Jackson, first vice president; Mrs. William N. Crowson, Clarksdale, second vice president, and Mrs. H. H. McClanahan, Jr., Columbus, fourth vice president.

Councilors attending the meeting were Mrs. I. J. Newton, Greenville, 1st district; Mrs. John B. Howell, Jr., Canton, 5th district; Mrs. A. C. Bryan, Jr., Meridian, 6th district. Directors present were Mrs. James T. Thompson of Moss Point and Mrs. A. E. Brown of Columbus.

Local presidents included Mrs. Richard L. George of Columbus, Mrs. Jack Sartin of Clarksdale, Mrs. M. S. Riddell of Winona, Mrs. Thomas F. Puckett of Hattiesburg, Mrs. David Wilson of Jackson, and Mrs. Hurd Gaddy of Gulfport.

The meeting was held in the conference room at state headquarters building in Jackson.

Scholarships Awarded To Future Nurses



Mrs. H. H. McClanahan Jr., right, and Mrs. A. D. Hartley, left, present four checks to two Columbus Lee High School graduates of 1961. The checks will pay the students' tuition for three year nursing courses at the Gilfoy School of Nursing, Mississippi Baptist Hospital. The future nurses are Fay Hodnette, second from left, who also received the Senior Class of 1961 scholarship at Lee High, and Thelma Smith. Mrs. McClanahan is nurse recruitment chairman and treasurer of the Northeast Mississippi Medical Auxiliary which awards a loan scholarship and Mrs. Hartley is president of the Lowndes County Nurses Association, which awards the Harriett Hatchett Memorial scholarship.

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ORIGINAL PAPERS

Common Sense and Coronary Arteriosclerosis

ROBERT S. GREEN, M.D., and PAUL G. GEISS, M.D.
Cincinnati, Ohio

The Memorial Heart Laboratory of St. Mary's Hospital, which the authors serve as director and assistant director respectively, is the diagnostic part of a heart surgery team. It was established to bring the latest clinical advances to the patient and to further research. The authors operate on the basis that a heart patient's health is in his own hands and maintain that coronary arteriosclerosis is as common as gray hair and wrinkles and just as widespread.

"Our hope must lie in what causes some persons to reach the age of 90 years, despite advanced coronary artery disease; our concern must be why others die young, despite relatively minor changes in the coronary arteries," they write.

In this paper Drs. Green and Geiss discuss their "common sense" rules for persons with coronary arteriosclerosis and their patients' responses to this regimen.

THE MEMORIAL HEART LABORATORY was established to bring the latest clinical advances to the patient and to further our own research.

In regard to coronary artery problems, we are nagged continually by heart surgeons who would like to try all their newfangled devices, e.g. sprinkling of talcum powder, superimposition of omentum, anastomosis of vessels, ligation of vessels, replacement of vessels, and others, and by pharmaceutical houses who would like us to research new drugs for angina.

Since 1946 our answer has always been the same. We have never seen a patient with arteriosclerotic disease of the coronary arteries in whom surgery was necessary to control angina. By adhering to simple rules of living and treatment, we believe these patients do a better job of growing their own collateral blood circulation than surgeons can ever hope to stimulate or implant in them.[1]

Our patients who follow these rules do not have angina, they do not need drugs, they do not all die; conversely, the majority have returned to full time gainful activities. How do we accomplish this? The basic facts have been known for years. In the first place, practically every one here has coronary arteriosclerosis and the majority have at least one vessel completely occluded. This is illustrated in Figure 1.[2, 3, 4]

The conclusion to be drawn is obvious. Let us not fool ourselves. The pipes are rusting the same

From the Memorial Heart Laboratory, St. Mary's Hospital.
Read before the Section on General Practice, 93rd Annual Session, Mississippi State Medical Association, Biloxi, May 9-11, 1961.

way the hair is graying and the wrinkles are wrinkling, and there is no known way at present to prevent this rusting.

The crucial and consoling fact is that practically everyone who dies at the age of 90 has severe, advanced disease of the coronary arteries, often with occlusion of as many as five or six major

CORONARY ARTERY SCLEROSIS

AUTOPSY INCIDENCE

Males

		Age	%
1.	GROSS EVIDENCE (U.S. Soldiers - Korea)	22.1	77.3
2.	SEVERE (600 cases)	30-40	18
		40-50	40
		50-70	75
3.	SEVERE ADVANCED (950 cases)	18-39	40
		40-49	75
		50+	82

Figure 1.

vessels. Frequently such a person has never had a symptom and died from pneumonia rather than heart disease. Our hope must lie in what caused these persons to reach the age of 90 years, despite advanced disease; our concern must be why others die young, despite relatively minor changes in the coronary arteries.

BLUMGART'S EXPERIMENTS

A clue to the solution is found in the animal experiments of Blumgart and co-workers,[5] who used a modification of the coronary artery injection technique of Schlesinger.[6] Young pigs were selected for the study because their heart circulation is comparable to that of human beings. In general, when a major coronary vessel was suddenly occluded to less than 13 per cent of the original cross sectional area, the pigs died within 20 minutes. However, when the vessel was partially occluded at a first operation and then totally occluded some two weeks later, a significant percentage survived due to development of collateral blood vessels. In several animals the collaterals were functionally adequate and there was no gross evidence of myocardial infarction.

This is the key problem. It is not the occlusion of a blood vessel as such that concerns us but the extent of the collateral circulation at the time of closure. More important, an adequate collateral circulation may develop with time so that an infarction will not occur when the artery is occluded (Figure 2).

Time, therefore, is the key to the solution. Treatment consists of reducing the work demands of the heart as much and as long as necessary to grow collaterals and prevent any myocardial oxygen deficiency.

A final important consideration is that the growth of collateral blood vessels is a relatively slow process.[7] Success in treatment will be in direct relation to the ability of the physician to restrict any increase of the work of the heart within the capacity of this gradually increasing circulation to deliver an adequate supply of oxygen to the potentially deficient myocardium.

CLINICAL APPROACH

In the clinical approach to this problem, we regard all men and those women with hypertension or diabetes as having disease of the coronary arteries. The only question we ask ourselves is whether the coronary arteries and collateral circulation are adequate to supply the oxygen necessary for the work demands placed on such a person's heart. The work load of the heart is determined by intrinsic or extrinsic factors. The intrinsic factors are too often forgotten. We can reduce the work of the heart by weight loss, lowering of high blood pressure, correction of anemia, proper control of thyroid function, supply of needed vitamins, and recognition and compensation of heart

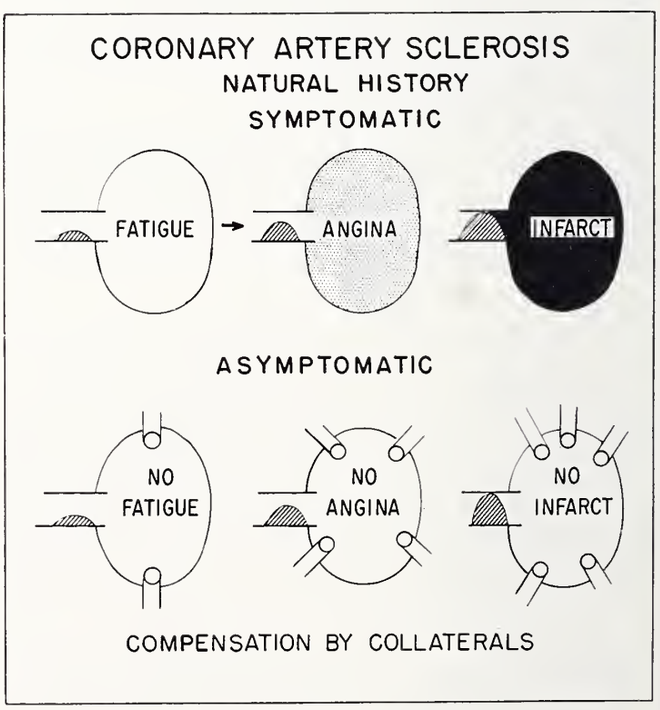


Figure 2.

failure, particularly in the early stages when it is usually overlooked. Unusual fatigue, insomnia, or a change in the shortness-of-breath pattern may be the first evidence of cardiac failure, and digitalization often alleviates these symptoms and reduces the incidence of angina pectoris. These intrinsic factors must be considered because they are important. However, for purposes of this presentation we will consider them not present or treated.

EXTRINSIC FACTORS

The extrinsic factors affecting the work load of the heart stem from a world where one has to run to stand still. It is of interest that the list of factors that raise blood pressure in a normal person is comparable to the list of factors that precipitate angina, i.e. fatigue, emotion, walking, strenuous activity, meals, and cold. There is evidence that an elevation of blood pressure increases the work of the heart and results in reflex constriction of the coronary arteries. It is our concept that the transient elevations of blood pressure produced by these factors result in an oxygen deficit of the myocardium in patients with an inadequate collateral blood circulation. This deficit is usually accompanied by angina, a change in the electrocardiographic pattern, or both. This concept explains, to us at least, why angina is usually associated with a rise of blood pressure and relieved as the blood pressure falls. The easy way to facilitate a fall of blood pressure is, of course, the absorption of 1/200 grain (0.30 mg.) of nitroglycerine under the tongue.

EVALUATION OF PATIENT

The main approaches to the evaluation of a patient's myocardial circulation versus his cardiac work load are (1) taking a painstaking medical history, since the principal evidence of the disease is a symptom, (2) a careful physical examination, (3) laboratory studies, including an electrocardiogram and radiologic evaluation, and (4) the physiological response of the myocardium to induced strain. The importance of careful study is twofold: (1) The majority of persons are heart-conscious and have pains of one sort or another in their chest, arms, neck and abdomen, (2) It is as serious a mistake to incorrectly diagnose angina pectoris as it is to overlook a case of angina masquerading as indigestion.

What is angina? (Figure 3.) Angina is always definite, never vague. It is usually substernal but may be manifest only by a pain in the wrist or in the region of the jaw. The patient knows when the sensation is there. He knows when it is gone. It recurs in a set pattern for any given area of oxygen deficiency in the heart. It starts in the same place, in the same way, and proceeds in the same manner. It is brought on by a definite set of factors that increase the heart's work and are learned quickly by the patient. It is relieved by eliminating these factors: if brought on by walking, it is relieved by standing still; if brought on by excitement, it is relieved by calming down. The patient learns that he can walk slowly on level ground and

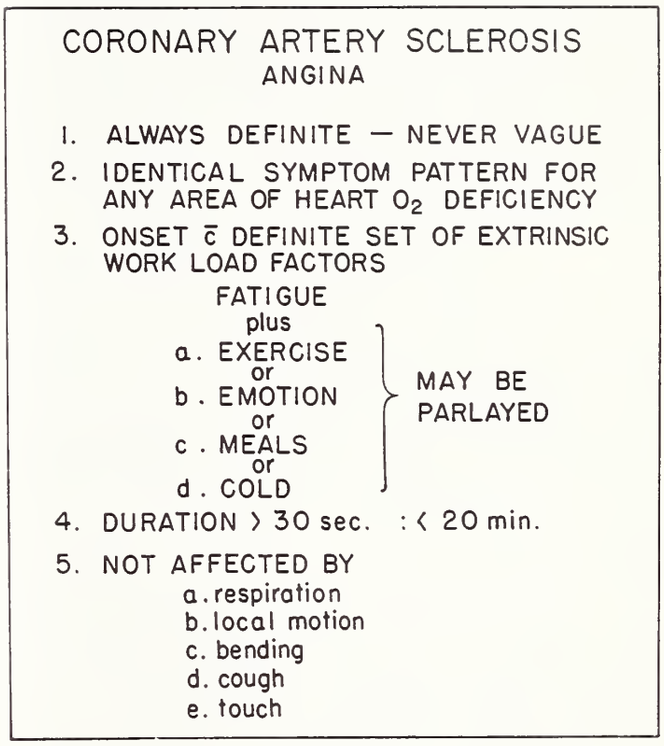


Figure 3.

avoid an attack of angina. He knows that if he walks fast, uphill, or into a cold wind, an attack may be provoked.

It is of interest that sensitivity to such work factors varies in individual persons. We have had patients develop angina after walking a short distance, while others can walk long distances but have an attack of angina at the slightest exposure to cold. These factors may be parlayed: a man may mow his yard without difficulty in the morning but have angina when he mows it in the evening, after a tiring day; he may walk one block without difficulty before having a meal but have angina with the same exercise, after having had a meal.

An attack of angina always lasts longer than 30 seconds and rarely longer than 15 minutes, unless myocardial infarction has occurred. It is not affected by breathing, touch, or body motions, such as twisting or bending. It does not occur at night,

unless it has occurred during the day. The only exceptions we have found to the latter statement were a patient who had severe nightmares and another who was a night watchman.

This brings us to a consideration of fatigue, the most important factor of all, particularly when we consider therapy. Angina is usually an afternoon or evening disease when a patient has relatively less heart reserve, and this fatigue factor interacts with other precipitating factors. We recently saw a patient who walked to work uphill after breakfast without trouble but had an attack of angina on the way home, walking down the same hill, and who always ate at home, even though he lived alone, because the angina was worse if he ate before he walked home.

IMPORTANCE OF FATIGUE

How important is fatigue? In our experience most patients who had their initial episode of myocardial infarction were in a state of chronic physical or mental fatigue at the time of the infarction. We believe fatigue not only is the earliest symptom of impending coronary insufficiency but also is the most important extrinsic factor in aggravating this condition.

If the diagnosis is clear from the history or from other findings, we usually do not perform tests that increase the oxygen need of the heart. However, when the high incidence of severe disease of the coronary arteries in males is considered, it is obvious that most patients with this potentially vicious process are without symptoms and have normal objective heart findings on physical examination, electrocardiogram, and x-ray of the chest. It is the apparently normal patient and the one who represents a doubtful case who are subjected to graded activities, accompanied by electrocardiography—the so-called tolerance tests. A two-step exercise test is performed first. If results are normal, the exercise test is repeated the next day, the patient holding ice cubes in the hand; then it is repeated with ice cubes after a tiring day, and next with ice cubes after a tiring day and a large meal, and finally after a large, black cigar has been smoked. A lively argument by the patient with his wife prior to the final test is desirable. The full gamut of these tests is not routine by any means. However, if the patient survives these experiences, we believe we can pat him on the back and reassure him about his coronary and collateral circulation without too much fear that he will drop dead as he leaves the office.

As stated before, we consider all men past the age of 20 years and women with hypertension or diabetes to have coronary artery disease. On the basis of these tests, their heart circulation is classified into four categories (Figure 4).

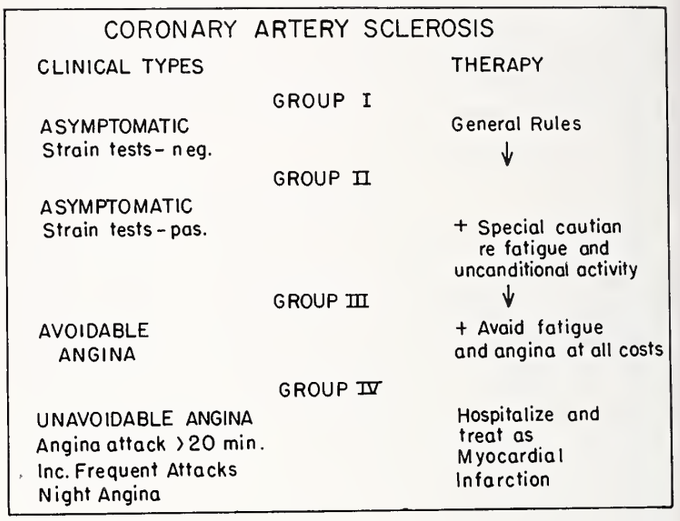


Figure 4.

Our approach to treatment is not directed toward the prevention of further coronary arteriosclerosis. We assume that this process is present and that it will progress. Our aim is to develop an adequate collateral circulation in advance of occlusion or unanswered myocardial oxygen demand.

The basic rules of therapy for all males past the age of 20 and for women with hypertension or diabetes are illustrated (Figure 5).

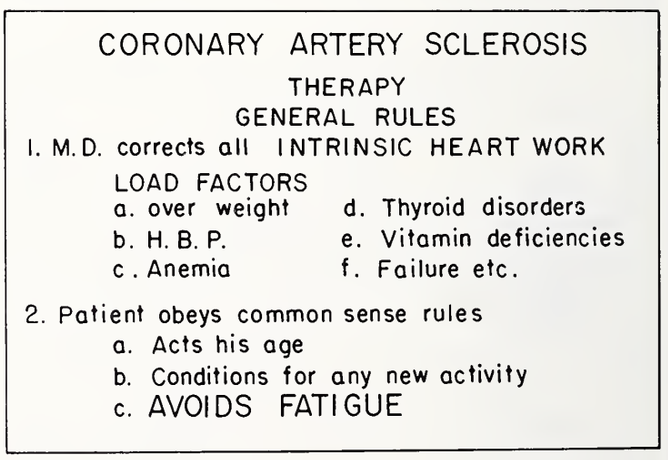


Figure 5.

In addition, we assuage patients' fears by pointing out that, in fact, we doctors and all their friends are also members of the arteriosclerotic-coronary "team" and, in the honest belief that this is true for most of these patients, we tell them that they are capable of attaining an age of 90 years, despite angina or infarction. We discuss with patients the problems of coronary arteriosclerosis in

common-sense fashion, to give them a realistic understanding, and we explain to them the concept of collateral blood circulation and how it will build up, given time. They are told that, although we do not know the specific factor necessary to stimulate collateral blood vessel growth, our experience indicates that collateral circulation will grow in advance of heart demand for practically any activity, provided they follow these three simple, common-sense rules:

COMMON-SENSE RULES

First, patients must act their age, in the sense that a ball player aged 35 cannot run as well as one aged 25, even though we doctors cannot detect a significant difference.

Second, patients must get into condition before attempting any new activity. Neglect of this rule explains why so many of them die of heart attacks while shoveling snow or hunting—they did not condition themselves for either of these pursuits. The young baseball pitcher gradually increases his activities each spring, first engaging in a few pitches, then one inning, and next several innings, before he attempts a full game. Our patients would not have thrown an arm away when they were young, and yet, unconditioned at the age of 50 years, they throw their heart away when it is not ready for the strain imposed by certain activities. There is a second important point about conditioning. To be in condition for one thing is not necessarily to be in condition for another. An athlete in perfect condition to run 100 yards is not in condition to swim 100 yards rapidly. This reminds us of the story of a patient who had a myocardial infarct. His work demanded climbing a flight of steps eight times a day. We had trained him for this activity over a period of months, making him walk first a few steps, then one flight of stairs, next two, and so forth. He returned to work and did well for 18 months, when he had another attack of angina. He said he got it polishing the rail while climbing the steps. We censored him. "We trained you to climb steps, not to polish rails. If you want to polish rails, let us know and we'll train you for that."

Third, and most important, is the common-sense advice to avoid physical or mental fatigue. Our contemporary pattern of fatigue, topped by an unusual degree of mental or physical strain, is taking its toll, no doubt. Nevertheless, one may wonder whether we are not deceiving ourselves. We often have seen executives who were harassed and overworked before they had a myocardial infarction but who became better executives after the infarction when they "put their feet up on the desk" and became "thinkers." Their fire ball gone, they "fool" their business problems with curves. The sad thing is that they need not have lost that fast ball in the first place.

In addition to the above, patients with a minor deficiency of heart circulation which is revealed only by exercise tests are cautioned to stay away from unconditioned, strenuous activity for several months but to lead an otherwise normal life.

Patients with severe coronary and collateral deficiency and angina pectoris demand our most careful attention. We must correct even the slightest deficiencies of the intrinsic factors that increase the work load of the heart, such an anemia, overweight, and others, and we must recognize and treat congestive heart failure early, because, in our experience, the heart in failure cannot rebound without help. A myocardium that does not put out an adequate supply of blood to the coronaries may be just as important a factor in angina as aortic stenosis which blocks the flow.

The moment a patient has angina he has an oxygen deficiency that injures his heart muscle, and if he injures the muscle often enough, it will be replaced by scar tissue. To this group we apply the fourth rule of common sense—avoid angina at all costs. It is just common sense to know that if one can get angina by walking fast and avoid it by walking slowly, it would be wise to accept God's warning and walk slowly; or if angina comes with large meals, to eat small meals; or if it comes with walking up steps, to use the elevator.

INSTRUCTION OF PATIENT

At this point, special attention is given to the instruction of the patient who has had angina pectoris. He is worried and has focused on the multiple, small chest pains that everyone has had since childhood. We teach him how to recognize the pain that counts, the one that constitutes angina. Of greatest help in recognition is the duration of the pain. "Does it last 30 seconds?" We keep time as the patient imagines the duration of his pains. Thirty seconds is a long time. Most of the nonsignificant "stitches in the chest" last but a few seconds.

We never give patients nitroglycerine at this stage of treatment. These patients, provided they do not fall into one of the four categories to be mentioned below, are allowed a trial period of one week to change their pattern of living in an attempt to prevent angina. If these patients can avoid attacks of angina, they will be able to increase their activities in time, as they become conditioned and as collateral blood vessels develop.

If by following these rules, the patient is able to avoid angina, he is allowed to progress slowly back toward normal activity, always ready to draw

back, however, if attacks of angina recur. At this time he is given nitroglycerine as a "spare tire" but is never allowed to abuse this privilege; he takes it if pain occurs or he takes it prophylactically if he cannot avoid breaking the therapeutic rules.

TYPES OF ANGINA PECTORIS

There are four types of angina pectoris, all serious evidences of an inadequate collateral circulation, that require more stringent treatment than the above: (1) angina that is not controlled by the above regimen, (2) an increase in the frequency of angina pains, (3) any one angina attack that lasts longer than 20 minutes, and (4) angina at rest. The latter is a late stage of this disease. The heart circulation in these patients is not adequate even when they are resting.

These four types of angina are the predecessors of myocardial infarction. These patients are treated just as if they had an infarct, in an attempt to establish collateral circulation and prevent infarction, with three weeks of bed rest after their last pain, anticoagulants, and other measures, i.e. just as the fourth group of patients with a recent infarct.

DIETS AND DRUGS

Today, we are always confronted with the question about drugs and diets that may lower the blood cholesterol level. We do not use them. Patients who see the "cholesterol sword of Damocles" poised over every bite of food are miserable; our only instruction to patients, after weight reduction, is to eat high-protein and low-fat foods —"eat the meat, cut off the fat." Perhaps cholesterol and its allies are the predecessors of further "pipe rusting"; perhaps this may be prevented by soul-searing diets or expensive drugs; or perhaps not. This reminds us of the man whose doctor advised him that he would live to be 80 years of age if he abstained from smoking, drinking, and women. He died of shock on his 75th birthday immediately after finding out his doctor had been wrong. We assume the pipes are rusting, the same way the hair is graying, and the wrinkles are wrinkling. Our only concern is to grow an adequate supply of collateral blood vessels in advance of "rusting" by following the common-sense rules outlined above. This is what was done by a man who, despite occlusion of six major blood vessels at some time during his life, none of which ever bothered him, died of pneumonia at the age of 90 years.

Therapy with anticoagulants in ambulant patients is another method of promoting chronic invalidism. We reserve use of anticoagulants for the relatively few patients whose myocardium has been replaced by scar tissue to such a degree that cardiac failure is a constant threat. We believe the greatest value of anticoagulants lies in prevention of complicating thrombosis and infarction in other organs, such as the lungs. In general, we do not use the long-acting nitroglycerine-like compounds. We believe that angina pectoris, like the blinker lights at the railroad crossing, is a valuable warning of impending trouble.

SMOKING

Smoking is forbidden during the treacherous days before angina or infarction has been brought under medical control. Subsequently, it is cautioned against but allowed. We have observed only two patients in whom smoking was a precipitating factor in producing an attack of angina. Patients are allowed to drink, they are urged to take routine vacations that are really vacations instead of energy users, and they may have relations with their wives. No wonder they like us and follow our suggestions.

Is this method of treatment infallible for everybody? Of course it is not. There is a hard core of disbelievers who, once they feel well and do not have pain, will extend themselves, will gain weight, and will get into trouble. They want pills, not common sense. The percentage of disbelievers will be in direct proportion to the skill of the physician as salesman and practitioner of the art of medicine—his ability to show kindness toward and a sincere interest in his patients. There is a second group of patients who, for financial reasons, short-circuit the approach suggested by us. In both groups a second infarct or the recurrence of symptoms often converts a patient to a believer. There are patients who form a third group. Their heart muscle has been replaced by scar tissue due to an extensive infarction or repeated infarction. Their heart circulation is good, but they do not have the muscle to do the job. It is interesting, however, to note how very few patients cannot be returned to at least a comfortable existence.

The proof of any method of treatment is in the results. We have been using this common-sense approach for some 15 years. Our patients have returned to all types of work. One patient, first seen after his third infarct, has been working full time as an automobile mechanic for eight years without an episode of angina. His hobby is fishing of a relatively strenuous nature, namely, casting from a boat in the northern woods. He has com-

pleted his sixth annual vacation and is planning for his seventh. Others are driving trucks, lifting heavy objects, digging ditches, and climbing steps as insurance collectors in poorer districts where three flights for 50 cents is the usual work load.

RESPONSE TO REGIMEN

We get repeated requests in the Memorial Heart Laboratory to study newer drugs for treatment of angina pectoris. We need this income, but our answer is always the same. "We do not have patients with angina who do not respond to this common-sense method of treatment, so why use drugs?"

As stated in the introduction, we are the diagnostic part of a heart surgery team. We respect the ability of these surgeons and the advances they have made possible in the field of heart disease, but we never have had a patient in whom an operation was considered necessary to control angina, to return him to a gainful occupation, or to enable him to live longer.

The patient response to our regimen is excellent. They like the approach that their health is in their own hands. There is no magic. The dread outlook that used to accompany angina and infarction has been lifted. They are given simple rules that make sense—to act their age, to condition themselves for new activities, to avoid fatigue, and to avoid an attack of angina pectoris itself. As they first crawl, then walk, and next return to work and finally to the frills of life such as dancing, golfing and fishing, their confidence in themselves and in their physician grows. The role of the physician is now that of teacher and disciplinarian. This means careful instruction of patients and regular consultations, to either praise them for good performance or let them know the physician's displeasure when they stray from the rules. Our satisfaction is in relieving their worries and in guiding them to the acme of their capabilities, while retaining a margin of reserve for emergencies. "Not too warm, not too cold, but just right." ★★★

441 Vine Street (Dr. Green)

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FOREIGN AID

Whenever the "poor"
Inherit the earth,
It'll be mortgaged
For all it's worth.

—DeWitt W. Hamrick, M.D.

The Brain Tumor Suspect

FORREST T. TUTOR, M.D., and JULIAN R. YOUMANS, M.D.

Jackson, Mississippi

Brain tumors are present in approximately two per cent of all necropsied cases and constitute the third most frequent admission for neurological service. The authors believe that every practicing physician should be able to recognize the "brain tumor suspect." They discuss types of intracranial tumors, diagnosis, and treatment.

CONTRARY TO GENERAL OPINION, brain tumors are not rare. Statistics from large necropsy series indicate that brain tumors are present in approximately two per cent of all necropsied cases.[1] Study of the type of cases admitted to any large general neurology service will show that brain tumors constitute the third most frequent admission.[2] Only cerebral vascular accidents and infectious diseases of the nervous system are more frequent. Therefore, it behooves every practicing physician to be able to recognize the "brain tumor suspect" as such so that proper investigation may be carried out. The incidence of the various types of brain tumors is shown in Table 1.

TABLE 1

INCIDENCE OF VARIOUS TYPES OF INTRACRANIAL TUMORS

Type of Tumor	*Per Cent*
Gliomas	43
Meningiomas	15
Pituitary Adenomas	13
Acoustic Neurinomas	6.5
Metastatic	6.5
Congenital	4
Blood Vessel Tumors	3
Miscellaneous	9

In spite of innumerable attempts to implicate various factors in the pathogenesis of brain tumor, almost nothing is known of the cause or mode or growth of primary brain tumors. Inheritance plays no significant role in spite of rare situations that would seem to suggest otherwise. One of the authors (F. T.) had two patients who were brothers in the hospital at the same time with primary brain tumor. One had an astrocytoma and the other had a glioblastoma multiforme. Trauma has sometimes been implicated as a precursor of tumors, especially meningiomas, but there are no statistics to indicate that brain tumors are common sequels of minor or severe head injuries.

Any type of intracranial tumor may have its initial symptom at any age but most occur within certain age ranges. The first two decades of life usually give rise to gliomas of the cerebellum, brain stem gliomas, optic nerve gliomas, pinealomas, craniopharyngiomas, teratomas, and granulomas. The adult life and middle age give rise to meningiomas, neurofibromas, gliomas of the cerebral hemispheres, pituitary tumors, and metastatic tumors.[2] The frequency of intracranial tumors in general is approximately equal in the two sexes.

SYMPTOM GROUPS

The symptoms and signs of intracranial tumors may be divided into two groups—the general and the localized. The general symptoms and signs arise from a generalized disturbance of cerebral function resulting from increased intracranial pressure or edema. The localized symptoms and signs arise from localized compression or destruction of nervous tissues in the immediate vicinity of the tumor.

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Headache, vomiting, and papilledema have been described as the classical triad of findings with a brain tumor. It should be said that no group of symptoms or signs are pathognomonic of an intracranial tumor. Other general symptoms and signs are mental changes, changes in the state of consciousness, convulsions, or visual difficulties of many sorts. Cardiac arrhythmias, elevation of blood pressure, and slowing of the pulse are symptoms usually found in severely ill patients in terminal status.

HEADACHES

Headaches from intracranial tumors usually have no particular characteristic features. Headache in a person not previously troubled with headaches should put the physician on guard. Headaches in children in the first decade are very significant. An intracranial tumor giving rise to unilateral headache is usually on the side of the headache. A posterior fossa tumor will sometimes gives rise to occipital headaches early then later spread to a generalized headache. Posterior fossa tumors also often give localized tenderness over the posterior fossa.[3] Approximately 90 per cent of intracranial tumors give rise to some headache, either generalized or localized. Brain tumor headaches usually are not severe and commonly are relieved by aspirin.

Vomiting, with or without preceding nausea, is much less frequent than headaches, especially in adults. The so-called "projectile" vomiting, that is, vomiting without preceding nausea, is rare and if present in a child is usually a symptom of a posterior fossa tumor.

PAPILLEDEMA

Papilledema is a very common sign of an intracranial tumor and the patient with papilledema should be considered a brain tumor suspect until proven otherwise. Some degree of papilledema probably occurs in about 90 per cent of brain tumors. Visual acuity is usually normal in papilledema but as the condition progresses over a period of weeks the blind spot will enlarge, the visual fields will constrict, and the acuity may be somewhat decreased.[4]

Tumors of the cerebral hemispheres are prone to give rise to convulsive seizures, either focal or generalized. Tumors of the posterior fossa and the brain stem rarely produce seizures. Any person who has a seizure should be considered a brain tumor suspect. This is especially true in persons over 40 years of age.

Mental symptoms such as lethargy, drowsiness, mental dullness, personality changes, conduct disorders, and even psychotic episodes may occur with tumors in any portion of the brain. They are more common with frontal lobe lesions.

GLIOMA FORMS

It is rather difficult to categorize the special symptoms and signs of gliomas because each glioma has its own characteristics.

The glioblastoma multiforme is the most rapidly growing form of glioma. It most frequently occurs in the cerebral hemispheres of adults and leads to death within the course of a year. It is not amenable to surgery or x-ray therapy.

Astrocytomas occur primarily in the cerebral hemispheres of adults and in the cerebellum of children. They are slow growing and often cystic, in which case a mural nodule of tumor may be present and can be removed with a complete cure.

The medulloblastoma occurs in the midline of the vermis of the cerebellum, usually in infants or young children. The usual presenting symptoms are headaches, vomiting, and unsteadiness of gait. Common findings are separation of the sutures of the skull, papilledema, and nystagmus.

Spongioblastoma polare astrocytomas occur primarily in the brain stem and the optic nerve, producing an enlargement of the structures they involve. Infiltration of the brain stem will produce multiple cranial nerve palsies, cerebellar and corticospinal tract involvement without signs of increased intracranial pressure.[5]

Ependymomas arise from the ependymal glia and therefore are in relationship with the ventricles, commonly the fourth ventricle. The fourth ventricle ependymomas occur most often in the same age group as the medulloblastoma and produce the same clinical picture.

Other less common types of glioma are the oligodendroglioma and the astroblastoma. Oligodendrogliomas occur in the cerebral hemispheres of young adults, commonly produce seizures, and often show calcification on x-ray. Astroblastomas have no particular distinguishing features.

BENIGN TUMORS

In the benign group the meningiomas are the most common. Meningiomas are benign tumors arising from cell clusters of the arachnoidal villi that compress rather than invade the brain. There is usually a long duration of symptoms. These tumors often cause thickening or thinning of the skull overlying the tumor and, because of their relationship to the cortex, seizures are common. Common points of location are the convexity of

the hemisphere, parasagittal area, sphenoid ridge, anterior fossa, falx, and posterior fossa.

PITUITARY TUMORS

Pituitary tumors are of three types—chromophobe, esosinophil, and basophilic adenomas. The chromophobe is much the more common and usually produces symptoms and signs in the following order: (1) endocrine disturbances consisting of hypopituitarism as the tumor growth destroys the normal functioning gland, (2) pressure on the optic chiasm as the tumor expands out of the sella producing a bitemporal hemianopsia. If the growth of the tumor is not arrested by surgery or x-ray therapy, it continues to enlarge to cause (3) pressure on the hypothalamus resulting in diabetes insipidus, disturbance of consciousness, loss of temperature control, and other hypothalamic signs. Finally (4) increased intracranial pressure may occur from further enlargement with pressure on the floor of the third ventricle that blocks the cerebral spinal fluid pathways.[6]

The pressure effects of growth of eosinophilic tumors are similar to the chromophobe but in addition the tumor shows signs of overactivity of the gland instead of hypopituitarism. If the tumor develops in childhood prior to closure of the epiphyseal lines, gigantism results. If the tumor develops after the epiphyseal lines are closed, then acromegaly results. As the term acromegaly implies, there is enlargement of the feet and hands but equally characteristic is enlargement of the skull, an increase in the subcutaneous tissue, and internal organs.

The rare basophilic adenoma manifests itself by endocrine disturbances, producing a Cushing's syndrome. They normally do not grow to sufficient size to enlarge and balloon the sella as is so characteristic of the chromophobe.

ACOUSTIC NEUROMAS

Acoustic neuromas are benign tumors that arise from the sheath of Schwann cells of the vestibular portion of the eighth cranial nerve. The onset of the symptoms usually occurs in the third to sixth decade. The frequency of symptoms are deafness 85 per cent, headache 65 per cent, ataxia of gait 65 per cent, tinnitus 55 per cent, hyperesthesia or paresthesia of face 47 per cent, and diplopia or blurred vision in 15 per cent. The frequency of neurological signs are deafness 97 per cent, nystagmus 80 per cent, impaired caloric test response 98 per cent, choked disc 59 per cent, seventh cranial nerve palsy 65 per cent, fifth cranial nerve palsy 47 per cent, and cerebellar ataxia 65 per cent.[7]

Metastatic brain tumors are usually a manifestation of generalized metastasis. Almost any malignant tumor can spread to the brain but in about 70 per cent of cases it is either from the lung or breast. The lesions are usually multiple, in which case surgery is never indicated, but about 25 per cent may be solitary, in which case surgery is sometimes indicated.

CONGENITAL TYPES

Congenital tumors include craniopharyngiomas, cholesteatomas, chordomas, dermoids, teratomas, colloid cysts of the third ventricle and choroid plexus papillomas. These develop from congenital cell rests. The craniopharyngiomas usually produce a syndrome closely allied to that of the pituitary tumors and in addition show a characteristic suprasellar calcification in about 75 per cent of cases.

Cholesteatomas, dermoids, and teratomas are rather rare tumors that can occur at any point of the nervous system and produce symptoms and signs according to their location and size. Approximately 90 per cent of chordomas occur either at the upper or the lower extents of the spine. Colloid cysts of the third ventricle are rare tumors thought to arise from the anlage of the paraphysis. They usually produce intermittent internal hydrocephalus as blocking of the foramina of Monro by the cyst occurs. Papillomas of the choroid plexus occur more frequently in the lateral ventricles of children producing early severe hydrocephalus with xanthochromic ventricular fluid which has an elevated protein.[8] In adults this tumor is more commonly found in the fourth ventricle.

VASCULAR TUMORS

Vascular tumors of the nervous system are either angiomas or angioblastomas depending upon the maturity of the cells of origin. These tumors include sinus pericranii, a midline vascular tumor that connects through the skull with the longitudinal sinus. Meningeal angiomas are various combinations of arteries, veins, capillaries, and cavernous spaces occurring in the meninges. Sturge-Weber disease is a localized atrophy and calcification of the cerebral cortex associated with an ipsilateral port-wine colored facial nevus in the distribution of the first division of the trigeminal nerve.

Arterio-venous malformations are mixtures of veins and arteries that may occur in any portion of the nervous system. They often give rise to convulsive seizures and recurrent subarachnoid hemorrhages.

Hemangioblastomas are tumors composed of embryonic vascular elements occurring mostly in the cerebellum and often associated with angiomatosis of the retina, cysts of the kidney and pancreas, giving rise to a familial syndrome referred to as von Hippel-Lindau syndrome. In the cerebellum they usually give rise to cerebellar signs and increased intracranial pressure from block of the cerebral spinal fluid pathways.

Granulomas that occur in the nervous system as a result of infection with tuberculosis or syphilis are rare lesions and are always secondary to disease elsewhere in the body.

TYPICAL SIGNS

A history and physical examination that discloses focal neurological symptoms and signs that have gradually increased in severity should make one suspect a brain tumor. Papilledema and signs of focal damage to the nervous system are typically seen with brain tumors. The papilledema tells the physician that intracranial pressure is present and the focal neurological deficits point to the location of the lesion.

Skull x-rays are abnormal in approximately 65 per cent of cases of brain tumor and are of localizing value in about 30 per cent of cases. Findings of value are shift of a calcified pineal gland, calcification within the tumor, signs of increased intracranial pressure (erosion of the clinoid processes, enlarged sella turcica, and increase in the convolutional markings of the skull), atrophic or hypertrophic changes in the skull overlying the tumor, or abnormal vascular pattern in the skull adjacent to the tumor (50 per cent of meningiomas will show such changes). Seventy-five per cent of craniopharyngiomas can be diagnosed by their characteristic suprasellar calcification. Pituitary tumors cause a characteristic erosion and enlargement of the sella turcica. Acoustic neurinomas often show enlargement of the internal auditory meatus and erosion of the petrous ridge. Optic nerve gliomas will show enlargement of the optic foramen on the side of the tumor. Curvilinear calcification will often be seen in vascular tumors. Metastatic tumors will often show multiple defects in the skull.

The electroencephalogram may be helpful as a screening device. Its findings are not dependable enough for use in definitely ruling a brain tumor in or out.

Lumbar puncture is contraindicated in the presence of papilledema. If the optic disc and the skull films are normal, a lumbar puncture may be done. Study of the spinal fluid in patients with brain tumor will usually show elevated pressure, elevated protein, and the cell count will be elevated in about one half of cases.

CEREBRAL ANGIOGRAPHY

Cerebral angiography is most frequently the study that makes the definite diagnosis of brain tumor. It is a relatively safe test and should be performed on almost all adult brain tumor suspects. If the diagnosis can not be ruled in or out by arteriography, it may be necessary to resort to pneumoencephalography or ventriculography. Pneumoencephalography and ventriculography help in diagnosis and localization of tumors by showing a distortion of the normal configuration of the ventricles of the brain.[9]

DIFFERENTIAL DIAGNOSIS

In making the differential diagnosis the most common conditions that intracranial tumors must be differentiated from are cerebral vascular accidents, infections of the central nervous system, demyelinizing diseases, epilepsy, degenerative diseases, and subdural hematomas.

Cerebral vascular accidents have a sudden onset of symptoms and usually no progression of focal neurological signs. Cerebral hemorrhage will give bloody spinal fluid immediately after the onset of symptoms. Cerebral thrombosis and cerebral embolism are differentiated from tumor by lack of progression of symptoms and normal cerebral spinal fluid color and pressure.

SPINAL FLUID EXAMINATION

Examination of the cerebral spinal fluid will differentiate infection from tumor showing marked increase in cells, increase in protein, decreased sugar, and positive smears and cultures if infection is present.

Demyelinizing diseases such as multiple sclerosis have a multiplicity of symptoms and signs because of multiple lesions and there may be a history of remissions and exacerbations of symptoms. The cerebral spinal fluid pressure is normal and EEG changes are not present.

The onset of epilepsy in childhood is less likely to point to tumor than is onset in later life. Brain tumors will almost always have other symptoms

or some localizing neurological signs but diagnostic studies will sometimes be necessary to differentiate the two conditions.

The degenerative diseases such as presenile psychosis, Pick's and Alzheimer's disease do not show papilledema, the cerebral spinal fluid pressure is normal, and x-rays of the skull are normal. The pneumoencephalogram will rule out tumor.

Acute subdural hematomas have evidence of recent trauma to the head; however, arteriograms or burr holes may be necessary to exclude the diagnosis of chronic subdural hematoma in those cases in which the head injury has been forgotten.

REVIEW OF CASES

The hopeless attitude taken by some physicians toward brain tumors is not well founded. In a review of 400 consecutive patients with brain tumor, Horrax disclosed some favorable data. These 400 cases were verified pathologically from 1932-1939 with a follow-up from one to seven years. He classified 224, or 56 per cent, as "favorable tumors," that is, tumors that were capable of complete and permanent removal, resulting in a cure of the patient. Among the 224 favorable tumors, there were 27 operative deaths, a mortality of 12 per cent. Ten patients died subsequently, leaving 187 patients who were living and believed totally cured. The classification of the favorable tumors were meningiomas 80, acoustic neurinomas 33, pituitary adenomas 30, gliomas (mostly cystic) 29, and miscellaneous 52 (including angiomas, hemangiomatous cysts, colloid cysts of the third ventricle, certain craniopharyngiomas and pinealomas, cholesteatomas, and the unclassified tumors). Twenty-seven of the 187 survivors had major disabilities due to late diagnosis and late removal of the tumor. A final total of 160, or 71 per cent, of the original 224 with favorable tumors who not only have survived but are leading useful lives with little or no functional loss.[10] Actually with recent additions such as improved surgical techniques, steroids, and hypothermic techniques, more of the favorable tumors should survive surgery without major disabilities.

SUMMARY

Brain tumors are present in 2 per cent of all autopsied cases. Almost nothing is known of the etiology of brain tumors. Certain types of brain tumors occur within certain age ranges. No group of symptoms or signs are pathognomonic of brain tumors. Headache, papilledema, convulsive seizures, and mental disturbances are often present. The individual types of tumors may give rise to their own characteristic symptoms and signs. The history and neurological examination will usually disclose focal neurological deficit that has gradually increased in severity. Signs of increased intracranial pressure will be found. Skull x-rays, electroencephalography, lumbar puncture, arteriography, pneumoencephalography, and ventriculography are used in the diagnosis of brain tumors. The differential diagnosis must include cerebral vascular accidents, infections of the central nervous system, demyelinating diseases, epilepsy, degenerative diseases, and subdural hematomas. The hopeless attitude taken by some physicians toward brain tumors is not well founded. ★★★

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DON'T SMOKE: FLIRT

"People look upon smoking as a tranquilizer. For the man over 40 who shouldn't smoke for health reasons, I think flirting is a suitable alternative."

—British physician Dr. Alistair Mackinnon

The Management of Facial Injuries

Part III

RICHARD T. FARRIOR, M.D.
Tampa, Florida

The following section completes this three part presentation on "The Management of Facial Injuries." In Part III the author concentrates on soft tissue injuries discussing the preparation of the wound, local anesthesia, and closure. He evaluates a number of suture techniques and dwells specifically on injuries of the ear, mouth, forehead, and cheek. He concludes the paper with a short consideration of the management of scars and keloids.

In Part II of this three-part paper, the author outlined procedures and described his armamentarium for management of fractures of the mandible, maxilla, and the middle face. In this concluding section, he discusses the treatment of soft tissue injuries.

SOFT TISSUE INJURIES

The goal in managing lacerations of the face is to prevent all scarring possible, leaving the patient with hairline or near invisible scars. Attaining this goal must be initiated at the time of the first emergency repair. The physician, practitioner, house staff or first year intern should be thoroughly schooled in the management of these lacerations as the opportune time for the best end result may be lost if the initial repair is shoddily done. The goal outlined would be greatly facilitated if emergency rooms were supplied with minimal basic equipment for plastic repair (Fig. 29). I know of no one, no matter how rough or tough, who would not desire to be spared facial scars and who does not deserve detailed attention regarding accurate approximation of the skin margins with closure in layers.

PREPARATION

First and foremost, debridement about the face should be minimal. No sectioned appendage, such as the nose or ear, should ever be discarded no matter how small the pedicle attachment. Sometimes the Lord is good to us and even completely-avulsed skin or appendages will survive as "composite grafts" in this area where we are endowed with a rich blood supply. Some debridement, however, is more often than not advisable. Debridement serves to remove the contused and damaged wound edge, thus providing a more even margin and at the same time removing dirt or other foreign particles. Removal of the skin 2 to 3 mm. from the site of the wound immediately provides tissue of better quality and with better healing properties.

The wound must be closed in layers, accurately approximating the underlying tissue, both to relieve tension and to prevent contracture of the underlying musculature with a resultant humping on one side or the other of the laceration. Minimal undermining may be carried out, however, some undermining facilitates closure without tension and facilitates the application of interrupted subcuticular sutures. Where distortion is to be prevented, such as at the lid margin, about the mouth, or near the nose, undermining is limited or not done at all on the side towards these areas and the skin away from these areas undermined fairly extensively to reduce the pull on these parts. Lacerations vertical to the margin of any orifice or across skin line oftentimes require rearranging by the use of single or multiple z-plasties to prevent vertical contracture and notching, say of the lip or eyelid margin.

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The wound must be thoroughly cleaned and irrigated. Sometimes this cleaning may be facilitated if the patient is not under general anesthesia by first thorough irrigating with normal saline and second profusing the wound with 1 per cent

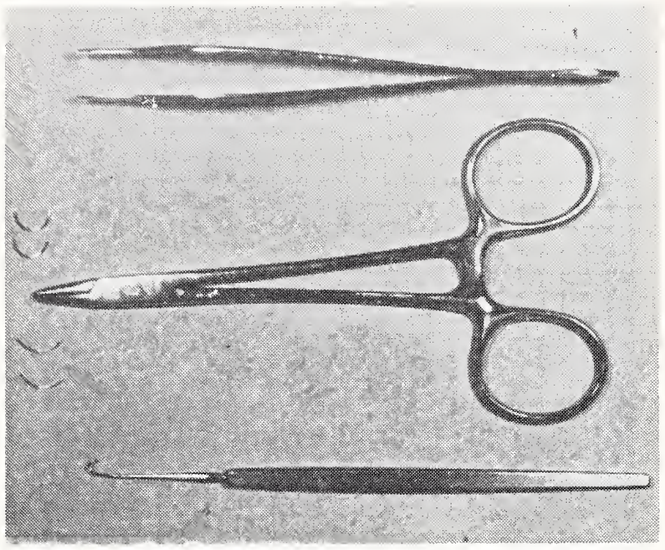


Figure 29. Soft Tissue Instruments. This illustrates the minimal equipment for careful closure of facial lacerations or incisions. The use of the small skin hook is emphasized. The full one-half curve small cutting needle (Anchor Brand 1844 #5) is most useful for application of the interrupted subcuticular suture. The small Brown needle-holder facilitates instrument tying. The multiple tooth Brown-Addison forceps are particularly helpful in managing cartilage fragments as for lacerations of the nose, ear, or eyelid. (See text for technique.)

xylocaine prior to further cleansing or injection. Hexachlorophene (Phisohex) followed by aqueous zephrin is used for washing about the face. The eyes are protected by the installation of a protective ointment while the face is being washed.

LOCAL ANESTHESIA

When the wound has been thoroughly cleaned and the operative field properly draped, further profusion of the wound with xylocaine prior to injection is most helpful to the patient under local anesthesia, especially children. Once some topical effect of the xylocaine is obtained, injection is carried out through the wound as this is less painful and since the wound most often can be considered as clean or cleaner than the surrounding skin. The use of a long (1½ inch to 3 inch) #25 or #26 needle is a great adjunct for this work and the small calibre is most appreciated by the patient. As few injection sites as possible are used and where possible, a second injection is made through a site already numbed by the previous injection.

CLOSURE

Closure in layers cannot be repeated enough. The most common cause of residual scarring is due to the single layer closure with large sutures which allows both separation and depression of the scar, not to mention suture marks. When underlying muscle, fascia, or periosteum have been lacerated, these must be brought into approximation. One of the most difficult closures and most common laceration which produces prominent humping and irregularities of the skin surface is the so-called beveled "trap-door" laceration. With this, especially in the curved laceration, the outer wound margin must be made vertical by the removal of the deeper areas of the dermis which extend into the wound as the result of the slanting cut. On the inside of the curve or opposite side of the wound, a beveled flap in effect has been elevated and the skin margin must be made vertical. In this type injury in particular it is most essential to bring periosteum and muscle layers together, again to prevent retraction of the muscle beneath the flap and humping on the side of the concavity of the curved scar.

Often it is more desirable to undercut the skin margins slightly such that the epidermal layer protrudes slightly over the underlying dermis so that when closed with the subcuticular suture there is slight eversion of the skin margin.

INTERRUPTED SUBCUTICULAR SUTURE

To execute the modified Halsted interrupted subcuticular suture, a small Brown needle-holder (Storz No. N 5700) is utilized to carry a small full half curve cutting needle (Anchor brand #1844-5) (Fig. 29). The suture is passed so that the knot will remain buried (Fig. 30). It is carried well into the corium lateral to the wound margin and at a slightly more superficial layer in regard to the epidermis laterally than at the margin where is comes out of the dermis. This is done purposely to produce slight humping. The needle is then passed through the dermis at the same level on the opposite side of the wound and brought out into the subcutaneous tissue. This is then tied, effecting slight humping and eversion of the skin margins. The tendency with time is for the scar to spread and become depressed. Slight humping at the time of repair is desirable in that this flattens with time and prevents these undesirable results.

The suture material I have utilized has vacillated somewhat from fine catgut (4 to 5-0) to

nonabsorbable material such as nylon or braided Dacron (5 to 6-0). These synthetic materials cause minimal suture reaction and have greater

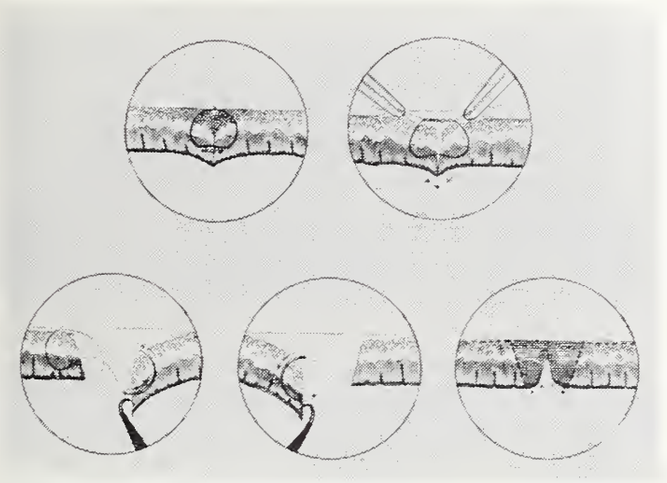


Figure 30. Interrupted Subcuticular Suture. Minimal debridement includes slight undercutting of skin margins. Suture is passed with the knot buried so as to effect slight puckering of the skin margins. A continuous subcuticular suture is passed superficial to the interrupted suture. See text for details of technique (Straith, R. E., et al.[26]).

tensil strength for their calibre. Since this is nonabsorbable material, it will sometimes extrude. However, with the extrusion the reaction is minimal. In my experience, however, this extrusion is more common with the nonabsorbable material and is rarely seen with plain catgut. Plain catgut, however, has the disadvantage of producing more tissue reaction and having less holding power. The catgut also has a tendency to come untied if any stress is placed on the wound margin in the process of closure. I was trained to use plain catgut and interrupted sutures wherever there was a question of wound infection and this still influences my choice of material on occasion.

This interrupted subcuticular suture with the knot buried has been perfected by my former chief in plastic and reconstructive surgery, Dr. Claire L. Straith, and I am deeply indebted to him and his son, Richard, for their instruction in applying this suture with the use of skin hooks. No forceps are required and are discouraged at all times. When one becomes adept with the use of the skin hooks, their use provides an easier as well as less traumatic method of handling skin.

SKIN SUTURES

When the subcuticular suture is properly applied, the uninitated assistant should ask "Why do you need skin sutures?" We like to hear this in that it indicates we have gotten good approximation with the underlying suture and the skin suture is now needed only for more accurate approximation of the skin edges. I am not opposed to the use of interrupted skin sutures of fine monofilament nylon or even fine silk, if these are removed early and seem indicated in a situation where drainage is either a possibility or desirable. If these are applied properly and loose enough to allow for postoperative edema and then are removed within 48 to 72 hours, stitch marks are minimal (Figs. 31 and 32). There is a threat of stitch infection leaving small abscesses lateral to the wound margin which may produce additional scarring. With the irregular laceration where



Figure 31. Facial Lacerations. Left: Multiple facial lacerations with severe laceration extending from scalp to right cheek. Note area of multiple points and small pedicles inferior to lateral canthus. Middle: Three months postoperatively, note some loss of tissue and undesirable scarring where markedly contused and irregular area existed inferior to lateral canthus of eye. Right: One year from original accident and after revision of cheek scar. Forehead result from initial plastic repair. Careful approximation of the tissues in layers is essential.

there is considerable angulation and zig-zagging or in vertical irregular lacerations of the eyelid, interrupted sutures are preferable (Figs. 32, 33, and 34).

I am also indebted to Dr. Straith for introducing me to the continuous subcuticular suture which provides accurate approximation without the threat of stitch marks and may remain in for as long as 10 to 14 days, thus providing additional reduction in tension of the skin margins. A fine 3/8 curve cutting atraumatic needle, carrying monofilament nylon is utilized and carried the length of the incision. Approximately every inch, the subcuticular suture is brought to the surface or walked (Sir Harold Gilles, "coming up for air") to facilitate removal. The suture is passed in the dermis external to the interrupted subcuticulous suture, carried approximately 1 to 2 mm. from the edge and for a distance of 3 to 4 mm. It is then brought out at the same level at which it entered and with slight back-tracking repeated on the opposite side. Laterally, away from the skin margins, the suture is slightly deeper than at entrance and exit to again effect further eversion.

SUTURING TECHNIQUE

In the *interrupted subcuticular suture,* the surgeon sits such that he is looking along the long axis of the laceration or incision. Closure is initiated at the end farthest away from the surgeon and sutures are applied every 3 to 4 mm. working back towards the surgeon. The skin margin is grasped with the skin hook on the surgeon's side of where the needle is to be passed. The suture is then passed from the undersurface through the dermis at the margin on the surgeon's left, as



Figure 33. Through and Through Lacerations of Lip and Cheek. Left: Irregular jagged through and through laceration. Note small pedicle superiorly on the right. Right: Internal lacerations and avulsed teeth and alveolar mucous membrane.

described above, and pulled through leaving approximately 1½ inches of suture material in the wound faced toward the surgeon. The suture is then flipped away from the surgeon and held in this position by the assistant so as to avoid figure of eight knots or tangling. The opposite skin margin, or the one to the surgeon's right, is then grasped with the hook carrying the left hand around the opposite side of the wound and again placing the hook to the surgeon's side of where the suture is to be placed. The suture is then placed through the skin margin in the dermis and brought out below. The needle is held steady with the curve of the hook until it can be grasped with the needle holder and pulled through. Sutur-



Figure 32. Multiple Facial Lacerations and Avulsion Skin of Nose. (a) Multiple lacerations with beveling, through and through lacerations of cheek and lip, and avulsion skin of nose. (b) Following skin preparation, note markedly beveled edges, "trap-door" type laceration of forehead, through and through laceration of cheek and avulsion skin of nose with preservation of alar cartilage in part. (c) Appearance following closure with interrupted subcuticular suture. Note extension lateral to corner of mouth. (d) Closure with fine 6-0 silk interrupted skin sutures. The skin sutures are necessary only for more accurate approximation of the skin margins. All deep structures must be approximated to reduce tension and prevent humping. "Trap-door" incisions require evening of the skin margins. A full thickness postauricular skin graft has been applied to the nose.

ing is then accomplished with the knot buried beneath. With practice, one's skill and dexterity in rolling the hook between his fingers improves, and he is able to control the skin margin well by placing the tip of one finger as backing while the margin is held by the hook.

In the *continuous subcuticular suture,* the suture is initiated approximately one cm. from the end of the incision line through the normal skin and brought out into the end of the incision. The back end of the suture is clamped to the drape and the subcuticular suture passed as described above, holding the needle holder as one



Figure 34. Through and Through Lacerations of Lip and Cheek. (Same patient as in Figure 33.) Left: Through and through lacerations should be closed in four layers extending from mucous membrane to include muscle, subcuticular suture, and skin suture. Where there are marked angulations and potential increased edema and drainage, interrupted sutures are advocated over a continuous subcuticular suture. In clean wounds without angulation, the continuous subcuticular suture is used. The small pedicle shown in Figure 33, Left, and in position here did not survive. Right: Postoperative appearance showing slight contraction laterally due to loss of the pedicle described. Patient did not desire further revision.

would hold a fountain pen with the needle curved in the standard right-handed position on the right side of the wound and inverted in a left-handed position for the opposite left side of the wound. This facilitates closure without crossing of the hands and provides greater mobility in the accurate placing of the suture. The maneuver is helped by countertraction on the skin away from the direction the suture is being passed. Picking up the needle for pulling through may be facilitated by the use of the skin hook. Once the needle has been pulled through, the surgeon can concentrate on replacing the needle while the assistant pulls the suture material through until it is snug. The excess suture is held slightly taut by the assistant so that the skin margin is open slightly to allow insertion of the needle on the opposite side. Again, it is usually easier for the surgeon to start working at the end of the incision away from him and work back towards himself.

ABRASIONS AND FOREIGN BODIES

Abrasions quite often are associated with the impregnation of foreign material such as carbon particles and dirt and these must be thoroughly removed to prevent greater tissue reaction as well as tattooing. Following the thorough rinsing preparation, the area must be meticulously gone over, preferably with magnification, and all foreign material removed with a fine forcep. Following this and especially in the more superficial abrasions, additional foreign material can be removed utilizing a scrub brush. This is most important, preventing both excessive scarring and the impregnation of material beneath the skin which produces visible tattooing or foreign body reaction and possible abscess (Fig. 36).

In addition to the small foreign particles mentioned above, all wounds when cleaned as well as during the time of debridement and repair, should be thoroughly inspected for foreign bodies within the depths of the wounds. Glass, in particular, may be overlooked when it becomes bloody and careful search should be carried out with instruments, palpation, and by the gentle wiping of the wound with gauze to pick up the projections of the glass. Loose pieces of bone should not be considered foreign material and, where possible, replaced with or without attached periosteum so that it may act as an autogenous graft filling in the bony defect.

EYELID LACERATIONS

Here in particular the surgeon must feel free to call on the consultation of an ophthalmologist if there is any question regarding damage to the cornea, conjunctiva, or globe. The eye itself may be anesthetized with topical 0.5 pontocaine, hydrochloride, or 2 per cent pontocaine eye ointment. The lid may be injected with 1 per cent xylocaine hydrochloride. The emergency management of eye injuries has been graphically shown in the scientific exhibit by Leo L. Meyer from the Veterans Administration Center in Jackson, Miss., and I recommend that you review his material, particularly if you do not do ophthalmology.

Once it is established that there are no lacerations to the eye itself, attention is directed to the lid margin. Again no tissue is discarded, no matter how small the pedicle. This is particularly true in regard to preservation of small flaps or even loose portions of avulsed lid which contain the tarsus (Fig. 35). All necessary time required should be taken to accurately replace and reposition the

structures in their normal position. With a chewed-up eyelid, this is often somewhat more of a jigsaw puzzle than one would expect. The lid is closed in layers utilizing 5-0 chromic catgut for the deep layers and 6-0 silk for the skin. Generally, absorbable material is used beneath the eyelid skin in that nonabsorbable material can be felt as a small lump beneath the eyelid skin of the lid and become a nuisance to the patient. The lid is closed in layers, starting from the inside out. The tarsoconjunctival layer is closed with interrupted 5-0 chromic catgut sutures placed such that the knot is on the external surface and not towards the globe. The orbicularis muscle is then closed and the skin closed with fine interrupted silk sutures. On occasion it may be necessary to close the conjunctiva and tarsus separately. Again when there are linear cuts vertical to the lid margin, it is preferable to break up this potential contraction by limited z-plasties in order that no notching will occur.

Either 30 per cent sodium sulfacetamide or 10 per cent sodium Sulamyd ointment may be used in the eye before applying a dressing. An eye pad and light pressure dressing is usually applied for at least 24 hours and after removal only antibiotic ophthalmic ointment applied to the incision. Four per cent homatropine and 1 per cent paradrine hydrobromide may be used to dilate the pupil when indicated. If an ophthalmologist is not immediately available, a corneal laceration may be covered with adjacent conjunctiva for protection and to reduce the incidence of infection. Conjunctiva on either side of the cornea may be ballooned-up with injection of 1 per cent xylocaine and the then redundant conjunctiva grasped with a horizontal mattress suture and closed over the entire corneal area. All wounds of the sclera and cornea should be seen by the ophthalmologist as soon as possible.

EAR

The same principles of management are followed for the ear. With the aid of antibiotics, there is considerably less fear of chondritis than in the past. In the face of this and since the pericondrium and cartilage may already be torn, I no longer fear the use of sutures directly into the cartilage if this helps in approximation and stability of the ear (Fig. 36). The anterior surface of the ear must necessarily be closed only with fine interrupted sutures. The posterior surface is closed with interrupted subcuticular suture and fine interrupted skin sutures. The margins of the helix are everted slightly and when possible, halving and stepping of the helical rim utilized to prevent notching. Again, no portion of an ear, even that which is totally avulsed, is ever discarded. It is placed back in accurate approximation, carefully dressed and splinted, and the dressing removed with extreme caution, avoiding undue pressure at all times. The same principles may be applied to cuts across the nose when involving the lateral cartilages or septum. The mucous membrane, cartilage, and skin are accurately approximated and sutures placed directly into the cartilage when needed. No totally or partially avulsed tissue should be discarded. Local hypothermia is advocated by some for survival of avulsed tissue and composite grafts.



Figure 35. Eyelid Lacerations. Left: Through and through laceration with tarsal flap held by minimal pedicle. Accurate suturing again in layers from the tarso-conjunctival layer to the skin is emphasized. Totally avulsed tarsus and eyelid may be replaced as a tarso-conjunctival graft after the lid skin has been removed. The surface is covered with a free skin graft or rotation flap. Middle: Following closure in layers. The irregular laceration served to break up a vertical contracture line. Right: Postoperative appearance without notching.



Figure 36. Ear Lacerations—Facial Abrasions. Facial abrasions should be meticulously cleaned utilizing magnification and all foreign particles removed with fine forceps and a scrub brush. This was the procedure followed over the malar eminence. Lacerations through the cartilage of the ear should be minimally debrided and sutured directly. If sutures are required for stability through the cartilage, these can be utilized with the protection of antibiotic administration. Where possible, stepping and eversion of the margins of the helix are utilized to prevent notching.

MOUTH

Through and through lacerations from the cheek or lip into the buccal mucosa membrane must be sutured in all layers (Figs. 32, 33 and 34). The use of a "figure of 8" suture from the buccal surface is sometimes helpful in that the mucous membrane can be picked up with one leg of the suture and the bulk of the substance of the lip including the muscle layer of the opposite side picked up, the suture carried to the initial side for the middle layers and back out through the mucous membrane on the side opposite the initial insertion of the suture. This closes these two major layers then with one suture. The skin is closed in the standard way with the interrupted subcuticular suture and either interrupted or continuous subcuticular skin sutures. More often I close in four layers, closing the mucous membrane with interrupted silk as a separate layer after approximating the muscle and fascia. The skin is closed as described. At the margins of the lip as well as at the rim of the ear, some eversion is desirable and at least within the lip, vertical mattress sutures are sometimes utilized to insure greater eversion and to help in the prevention of notching of the margin. Silk is most often used in the buccal mucous membrane as this is softer and more pleasant to the ever palpating tongue than catgut.

FOREHEAD

The forehead is particularly vulnerable for beveled cuts and the "trap-door" lacerations described above (Figs. 31 and 32). In this area over a bony prominence it is particularly important to close all deep layers including the perichondrium and muscle or aponeurosis. This area is also the site of frequent small avulsions not going through the full thickness of the skin and beveled slices and gouges which are superficial but most annoying. Often these must be excised or at least trimmed and carefully dressed with fine mesh impregnated gauze. Either initially or at a later date, it is often necessary to dermabrade these multiple roughened areas.

CHEEK

The cheek generally is mobile and readily repaired with minimal tension (Fig. 32). The principles outlined for through and through incision must be kept in mind and the buccal surface carefully examined for lacerations. There is always the possibility of laceration across Stensen's duct. When this occurs, a small polyethylene tube can be inserted and fine vascular silk on an atraumatic needle utilized to reapproximate the duct over the tubing. The tubing allows continuous flow of saliva and serves as a splint to the repaired site. If the laceration through the duct is quite distal to the gland, it is possible to reinsert this into the buccal mucosa membrane at a different site should this prove more practical than reanastamosis.

SCARS

If the above principles are followed, postoperative and post-traumatic scarring should be minimal. When the patient is seen secondarily with unsightly scars, the same principles of skin care outlined above must be followed. The scars should not be repaired earlier than three months and preferably six months to a year following the time of the injury. This allows the regression of any tissue reaction and some softening of the wound. Usually with the secondary repair, tension is minimal and there should be adequate tissue to allow excision of the scar well into normal skin. Slight

undercutting so that the upper dermal surface of the skin is minimally overhung to assist in eversion is again followed during excision and the skin closed as described above. It is not necessary to remove all of the scar tissue beneath the skin surface and in fact this may serve sometime to fill in the underlying defect if left intact. More often there may be retraction of the underlying structures, particularly the muscle layers, and these require approximation to fill in the depression and prevent further depression of the scar with healing (Fig. 37). Whenever possible, the direction of the scar should be altered to follow as nearly as possible the skin lines. This is true unless to accomplish this the scar must be extended too much in length. Contracting scars with notching are repaired by excision, undermining of the skin on either side, and the utilization of the principles of the z-plasty.



Figure 37. Facial Scars. Left: Unsightly scar resulting from a laceration across the skin lines and a bony prominence as well as a failure to close the deeper layers in the initial repair. Right: Revision to a hair-line scar following the principle of closure in layers and utilizing both interrupted and continuous subcuticular sutures.

Slight irregularities due to the cuts or avulsion of split thicknesses of the skin are best repaired by machine dermabrasion. If a large area is dermabraded, we have been utilizing Adaptic which is impregnated with minimal nonreacting lubricant. The larger mesh of the Adaptic allows the serum to exude into an overlying fluff dressing. When this fluff dressing is removed the next day the Adaptic is left in place to dry and come off by itself when healing is completed. This is usually within seven to 10 days.

KELOIDS

These are, of course, our worst enemy and oftentimes can be most discouraging. In general one can only follow the principles of meticulous atraumatic surgical technique and one has a certain freedom in trying out whatever is the latest fad for the prevention of the keloid. It is perhaps helpful to give x-ray, either pre- and postoperatively or in the immediate postoperative period but there are those who are strongly opposed to this. Some feel that the phasic aspect of keloid should be watched and the keloid operated during the quiet phases when the redness and itching are subsided. Those who advocate this advise no x-ray or chemical care. Injection hyoluronadase has its supporters, and more recently the administration of prolonged doses of Decadron have been advocated. My personal program has been to give preoperative x-ray long enough in advance (10-14 days) so that some x-ray effect is taking place at the time of surgery, excise the keloid just within its substance avoiding normal skin, giving an additional dose of x-ray immediately following surgery and administering Decadron over a period of three to four or six weeks. Take your choice. I do not know whether the subcuticular suture should be absorbable or nonabsorbable but certainly tension must be minimized.

LARYNX

Perhaps this is out of place in this particular paper but certainly should be given consideration. Trauma to the larynx is seen more and more frequently, either with lacerations or more particularly with crushing injuries. There is almost invariably considerable edema and hematoma formation which may produce complete obstruction. The examining physician should be alert for this condition and prepared to perform a tracheotomy when necessary. Palpation of the larynx frequently will reveal crepitation or there may be subcutaneous emphysema due to the escape of air from lacerations within the larynx. Where there are lacerations and distortions or dislocations of the arytenoids from crushing, particularly of the subglottic area, the insertion of a stint prosthesis may be necessary to prevent stenosis. More often these injuries may be handled conservatively and observed after the hematoma and swelling subside by both direct and indirect laryngoscopy.

If there is any question about crushing of the cricoid, the stint is recommended. With posttraumatic subglottic stenosis, it may be necessary to remove a large amount of scar tissue including sections of the cricoid cartilage and insert a sponge rubber stint and skin graft. Following the removal of the stint, the various plastic prosthetic stints may or may not be necessary. In the older injury, it is often difficult to determine if the arytenoids are fixed from fracture or if the recurrent laryngeal nerve is involved in these scar contractures. Arytenoidectomy with direct suturing of the vocal

cord laterally may be necessary if both cords remain in the midline. Certainly the maxillofacial surgeon seeing emergency cases with multiple injuries must be alert for this type of injury.

CONCLUSION

In this overall coverage of facial injuries, I hope that the reader has gleaned some ideas which he can add to his own armamentarium and that the reading may stimulate his interest to pursue further in more detail the management of specific facial injuries.

In summary, I would re-emphasize critical evaluation regarding general management, and the establishment of an order of priority regarding which phase of the injury or patient's general condition is to be treated first. All physicians should be familiar with the indications for and technique of the emergency laryngotomy and tracheotomy.

The need for early meticulous repair so that unsightly scars and disfigurement may be prevented cannot be overemphasized. As a rule, I prefer to reduce the underlying fracture before plastic repair of the soft tissues.

The bone fragments should be placed in as nearly exact an alignment as possible with particular attention to the nasal airway, dental occlusion, normal motion of the jaw, and the prevention of ocular disturbances. Early attention should be given to injuries of the facial nerve regarding the location of the injury and immediate decompression and repair carried out when indicated.

Soft tissue injury of the face should receive minimal debridement as even the narrowest pedicle will often survive in this area. Debridement serves to clean the wound and effect more regular skin margins for approximation. The final result of the desired minimal scarring depends upon accurate approximation of skin margins without tension. This goal requires detailed attention to the underlying tissue with accurate closure in layers. In my hands, the interrupted subcuticular suture (modified Halsted subcuticular suture) applied with a small full-curved cutting needle and the aid of a skin-hook is the best insurance against tissue trauma and widening or depression of the scar with time.

Facial injuries should be repaired as soon after the accident as possible for the best results. It is the rare injury or complication which is so severe that it cannot be handled in the first few hours.

It is the obligation of the physician called upon to manage these cases to give them his immediate attention and to spend the extra time necessary for better functional and cosmetic results. ★★★

Bayshore Boulevard at Hyde Park Avenue

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Changing Perspectives in Medical Education

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Medical education in the United States has undergone enormous evolutionary and revolutionary changes in the last two centuries. The author reviews these modifications and suggests others for the future. Specifically, he advocates (1) educational techniques that will enable the student to undertake more of his own education and (2) a complete integration of undergraduate and graduate medical education.

THE ONLY JUSTIFICATION for my speaking on changing perspectives of medical education is my association with the School of Medicine at Western Reserve University where a revolution in medical education has occurred during the past decade. This reorganization of our entire program and faculty has engendered among members of the faculty a large amount of discussion, a great deal of controversy, and an effort on the part of many of us to learn as much as we could about not only medical education, its past, present, and future needs, but also as much as possible about the learning process itself.

EVOLUTIONARY CHANGES

We all tend to forget rather easily the enormous evolutionary and revolutionary changes that have taken place in medical education during the past two centuries in this country. It might be worthwhile to review some of these changes briefly in order to provide a background for some of the more daring hypotheses which I would like to present to you toward the end of this discussion.

Prior to the American Revolution all medicine in this country was taught by preceptorship. A young man, usually with a rather meager education, would attach himself to a practicing physician and after observing the physician's approach to patients, and his techniques in compounding drugs would make every effort to emulate him until he felt that he had a sufficient amount of information so that he could assume the responsibilities of practice himself. This general concept embraced more the connotation of training than of education in that it essentially consisted of the acquisition of techniques and attitudes rather than the acquisition of a basic fund of knowledge upon which an individual could elaborate his own thinking and arrive at intelligent conclusions when faced with new facts or new observations. It was not until 1765 that the first medical school was established in this country at the University of Pennsylvania. For over a century following the organization of this medical school there were no rigid requirements for admission to medical school. It was not until 1871 when Eliott at Harvard required a certain number of academic accomplishments for admission to the school of medicine at Harvard. In 1880 the first four-year medical course was inaugurated. It was not until 60 years ago, in 1901, that a college degree was required for admission to medical school.

JOHNS HOPKINS FACULTY

One of the most significant and revolutionary events that took place in the historical development of medical education in this country was the organization of the faculty at Johns Hopkins University in 1893. At this time rigid admission requirements were effected. A full-time staff whose primary responsibilities were those of teaching and investigation was instituted and I am sure that everyone is aware of the great success which this innovation has subsequently enjoyed. Full-time staffs first came to the preclinical departments during the latter part of the 19th century and were the general rule by the early portion of the 20th

From the Department of Surgery, Western Reserve University School of Medicine and University Hospitals.
Read before the Alpha Kappa Kappa alumni of the University of Mississippi, Jackson, March 17, 1961.

century. Full-time staffs in clinical departments arrived much later, and there are schools that still have very few, and some, no full-time clinicians. It has become obviously important to have individuals in clinical departments who not only feel but know that their primary responsibilities are those of an educator and investigator. These full-time clinicians by being paid at least a basic salary do not have the burden of making their living exclusively from the practice of medicine and can devote sufficient time to the many inter-relationships between education, research, and patient care that make any medical center a progressive and successful institution.

THE FLEXNER REPORT

In 1910 Flexner, supported by the Rockefeller Foundation, made an exhaustive report on the state of medical schools and medical education in this country. This report did more to improve the loosely existing relationship between universities, schools of medicine, and teaching hospitals than any other single event that has occurred. Many of the schools that were still teaching medicine according to methods that were acceptable back in the 19th century were forced out of existence, solely through the authority of this complete and penetrating report.

During the first five decades of this century there was a slow but progressive change in medical education and an alteration of the emphasis from descriptive science and training in techniques to an emphasis upon functional science. At first this was evident in the functional interpretation of morphological and histological variations. It proceeded to the interpretation of integrated functional changes. Much of the work that was done by Cannon on the autonomic nervous system was related to this type of observation. It finally proceeded to planned experimentation of purely functional problems, whether there was any direct and specific relationship to organic structure or not. Just as knowledge has been made available in any field of human endeavor so it has in the medical sciences. There has been a progression from observation through empiricism and pragmatism to experimentalism.

In the mid-40's and through the 50's there has been literally an explosion of scientific knowledge in both physical and biologic sciences to the point where the gap between what can reasonably be taught in a four-year medical program and what is known, and more important what will be necessary in the care of patients in a few years is widening at a frightening pace. The introduction of new research techniques such as electron microscopy, cytochemistry, isotopic labelling, microchemical techniques, tissue culture, and biochemical genetics, have all produced a fund of knowledge that our medical faculties, primarily because of time limitations, cannot through educational programs translate into the scientific background that will permit the student, and subsequently the practicing physician, to have a firm intellectual grasp of the diseases he sees and the therapies he employs.

The difficulty among educators in keeping pace with this ever increasing mass of scientific data has been compounded by another turn of events in present day medical education. Following World War II educators in clinical departments became aware of the fact that there has been a marked under-emphasis on such things as ambulatory medicine, chronic disease, emotional, social, and economic influences upon disease, and the patient-doctor relationship. To a great extent this was legitimate but as is true of so many things we do in this era of social and political insecurity, we turned around and went the other way too far. This I am sure was not done consciously but solely because of the limitations of judgment that exist in the human mind.

WESTERN RESERVE PROGRAM

The time required for the expansion of teaching in these areas generally came not only from other areas of clinical medicine but also from many of the preclinical medical sciences. A further complication was the change in orientation of the student. As an example the following may be pertinent. When the curriculum was reorganized at Western Reserve University in the early 50's the freshman student was assigned to a family wherein the mother was pregnant. One objective was to permit him to see early in his career the influence of social and economic conditions on the course of the pregnancy or upon intercurrent disease among other members of the family. He also had an opportunity to observe the emotional or economic effect of the pregnancy and illness upon other members of the family. It was also anticipated by some of the more naive members of the faculty, including myself, that the early exposure to disease when the student was simultaneously engaged in studying many of the preclinical sciences would motivate him even more intensely to learn the medical sciences and their inter-relationships even more thoroughly as a background for the comprehension of the diseases he was observing. Many of the students so engrossed in the

human and humane aspects of the family they were observing were more highly motivated to learn the practical aspects of clinical medicine and became less interested in a thorough background of knowledge of the medical sciences.

TWO HYPOTHESES

These two observations, the prodigious accumulation of scientific information and to a certain extent the misappropriation of emphases during the four years of medical school, have led to the first of two inter-related hypotheses which up to the present time have elicited little enthusiasm and support. First, a reorganization of our whole system of medical education must occur within the next few years if the lag between scientific knowledge and medical education is to close. This will require first a careful appraisal of techniques of education that will motivate the student to undertake more of his own education and to equip him with the capacity for enhanced perception and critical analysis of the scientific data with which he is confronted. The second consideration is a matter of time available for developing not only a sufficient background knowledge of medical science but an opportunity to apply it under the supervision of professional educators to the problems of clinical medicine that lend themselves today to critical analysis. As time progresses these will be inevitably more numerous.

GRADUATE MEDICAL EDUCATION

The introduction of a time factor in any discussion of medical education ordinarily arouses violent emotions and there is little doubt that it should, since the complete education of a physician today is a long and expensive process that must be restricted for many reasons but none more obvious than the length of time that a physician is useful and productive. The time factor does lead, however, to the second hypothesis which stated simply refers to the urgent need for the universities to assume the responsibility for the complete education of a physician and not solely for the four years leading to an M.D. degree. As in 1910, when the marriage of universities, teaching hospitals, and undergraduate education took place, it is now time to consider seriously the marriage of universities to graduate medical education, or as it is commonly referred to, intern and residency training.

I am acutely aware of the economic and staffing problems that this proposal would impose upon any university administration and faculty, but I believe these can be solved. It is perfectly true also that even at the present time the faculties of many medical schools influence significantly the pattern and operation of graduate programs through university, veterans administration, municipal, and other affiliated hospitals. This, however, is not sufficient. A complete integration of undergraduate and graduate medical education is desirable without necessarily increasing the length of time involved and very likely decreasing it.

AN ENORMOUS CHALLENGE

Academic or university sponsored requirements for graduate education are as necessary as they are for undergraduate education. With a longer period of time that the embryonic physician is under the influence of professional scientists and educators, the better integrated will be his background of scientific information concerning human biology and the more mature will be his capacity for scientifically approaching clinical problems. There are at the present time over 40,000 graduate medical students in intern and residency programs and fewer than 30,000 in undergraduate programs. This represents an enormous challenge not only to the universities but also to the medical profession. Exactly how it can be accomplished will require the mature wisdom and driving energy of a good many educators and administrators who are dedicated to preserving and extending leadership in medicine and medical science in this country for the benefit of future generations all over the world.

FINANCIAL ASPECTS

The privately endowed medical school will have especially difficult financial problems and very likely cannot assume such responsibility without external aid. The influence and support of many organizations such as the American Medical Association and the Association of American Medical Colleges will be necessary if this development is to proceed in a realistic way. Before, however, the gap between scientific knowledge and the practice of medicine which now is on the horizon confronts us like a colossal specter and reduces us to the position of practicing pedestrian medicine, I hope that many medical statesmen will accept the challenge and lay plans for the complete medical education of the physician. ★★★

2065 Adelbert Road

The Family Physician and Emotional Disturbances

WILLIAM F. SHEELEY, M.D.
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The author writes that patients are coming to expect their physicians to treat many of their physical and psychiatric illnesses simultaneously. Such comprehensive medical therapy requires attention not only to physical and emotional disturbances within the patient, but also to the ways families and communities affect those disturbances, and the uniting of all these components into an integrated therapeutic approach, he points out.

The family physician who can learn and understand simultaneously the physical, psychological, social, and economic aspects of his patients' problems is uniquely placed to give this integrated therapy, he concludes. Dr. Sheeley is chief of the American Psychiatric Association's General Practitioner Education Project.

SINCE ANTIQUITY, THE PHYSICIAN has practiced medicine as an art and a science. His art was long and his science short, however, until 20th century research filled his head with facts and his hand with scientific tools. Therein lies the question: Has art now lost while science gained? What of the human understanding with which the wily old clinician at the bedside confounded the medical student? What of warmth and exquisite gentleness in the consulting room? Has the doctor lost his special human quality?

Many of his patients answer that the art of medicine has been lost.[1] The doctor thinks more of his laboratory tests, they insist, than of people. As A. E. Nourse points out:

> We imagine him [the family doctor] delivering babies, removing appendixes . . . fulfilling . . . his time-honored role of friend, counsellor, confessor, and—incidentally—physician to his flock.[2]

Patients fear, H. J. Geiger found, that this kind of family doctor will disappear, and that with him something more than drugs will be lost.[1] "Above all, the surveys show, [patients] want convincing evidence the physician is interested in them."[1]

Does this demand for personal interest come just from loneliness and child-like dependency? Not at all. As the patient knows, somehow, personal interest is a part of the very healing process itself. Young reminds us: "When pain and fear make a sick person fear all is lost, the laying on of healing hands brings solace and hope."[3]

Patients want proof of their doctor's interest. They want him to be willing to sacrifice for their sakes. Otherwise, they feel deserted and helpless. They are uneasy and irritated, therefore, when a doctor will not make a night house call.[2]

Patients also want their doctor to understand them in the context of their families. The pervasive emotional importance of the family is attested to by its ubiquity and indestructibility. Almost all of the patient's important emotions are affected by his family, and his emotions, in turn, affect his family. Family and patient are inseparable parts of the same whole. To understand the individual family member, the doctor must know the family; to understand the family, the doctor must know its individual members.[2]

Patients expect from their doctor reassurance, sympathy, protectiveness, and exhortation. Perhaps neither patient nor physician thinks of these as psychotherapy. If they think them at all, they may call them simply good medicine (as, indeed, they are). Nevertheless, these are tools used daily by the psychiatrist.

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The sheer weight of expanding medical knowledge may cause the doctor to despair of ever grasping all of medicine; he may, therefore, become just another specialist treating a detached organ system. True, in an attempt to reintegrate patients thus torn apart by medical specialization, he may join other kinds of specialists in a clinic or similar collaborating group. Even in such groups, however, with no single doctor watching the broad picture, the patient as a person all too often falls between the specialties.[2]

When that happens, doctor and patient are in for trouble. A sick person, after all, wants relief of his symptoms. He cares little about expert opinion and laboratory results excepting as those will relieve his pain. Even when diagnostic evaluation shows no physical disease, he still wants help. If sympathy is that help, he wants sympathy; if his doctor fails to give him sympathy, he becomes resentful.[3] The doctor-patient relationship is now at crisis. The patient with low intelligence and unstable emotions may begin to question his doctor's competence; he may think the doctor is neglecting him. The doctor must see the danger signals and resolve the crisis by skillfully employing psychiatric principles. If, instead of using these principles, he exhibits arrogance, authoritarianism, or dogmatism, he may precipitate another of today's unfortunate law suits.[4]

WHAT THE PATIENTS WANT

What such patients want is psychiatric help, although they may not realize it and even though they might resent it under that name. Of recent years, however, more and more patients have become aware of their desire for their doctors to treat mind and body together. They no longer deny emotions in themselves; they no longer equate emotional upsets with craziness; they no longer try to hide their emotions from the doctor.[5] They may, in fact, judge his competence from his skill in dealing with their emotional problems.

Having admitted their emotional problems, moreover, patients expect the doctor to do something about them.[5] They expect him to treat much psychiatric illness which he once would have sent promptly to a mental hospital. When he treats them in his office, they can, perhaps, continue to work, or at least remain with their families. If they must nonetheless go to a mental hospital, they still want their doctor to keep track of them while they are there and take over their treatment again upon their return.[6]

As the public learns more about psychiatry, more patients understand that many symptoms of illness are caused or at least affected by social problems. These patients expect the family physician to understand this interaction between social problems and symptoms, and therefore to see that ". . . so-called nerves are not to be dismissed lightly."[7] Medical schools are revising their curricula to put greater emphasis on emotional aspects of medicine.[8]

BLAIN'S SURVEY

One can say, then, that people expect their family physician to give them broad medical therapy that weaves in not only the contributions of the specialist, but also those of family, friends, and community. This expectation was underscored by the results of a survey reported by Dr. Daniel Blain, commissioner of mental health of California and former medical director of the American Psychiatric Association.[9] In this survey, 3,500 leaders from a wide variety of public and private fields were asked their opinion of how doctors should treat diseases. The majority said that the family doctor is the one best suited to give the comprehensive treatment patients want, i.e. ". . . not merely specific . . . treatment . . . but some understanding of themselves in relation to their environment."

The respondents said further that doctors should acquire greater theoretical knowledge of psychological medicine and emotional problems, should minimize the impersonal nature of the diagnostic assembly line, should become the patient's friend and good listener, and should establish more rapport with their patients. As Blain puts it:

> The public wants physicians to recognize and respond to the emotional needs of the patient. In a world in which the swing . . . has been in the direction of . . . more and more attention to the x-ray and microscope and less general observation and reaction to the patient himself, there is a demand to go back to treating the whole patient rather than the disease.[9]

CONCOMITANT PROBLEMS

Perhaps patients expect doctors to treat their emotional disorders because they realize, somehow, that somatic and psychic disturbances tend to come together, and therefore must be treated together. Jack Ewalt observed that alcoholic, depressed, and other psychiatric patients often have concomitant somatic problems requiring attention.[10] Certainly, the fact that a patient has sig-

nificant emotional disturbance does not justify abandoning good and careful medical attention to his physical disorders: "The physical factor is still important, and the history and physical examinations as essential as ever . . . [This factor] must be . . . well and adequately evaluated," according to C. J. Houston.[11] After all, emotional disorders may themselves either cause physical illness or make it worse.

PSYCHIC EFFECTS OF ILLNESS

Conversely, a physical illness often has a concomitant emotional disorder; the illness may, in fact, be a principal cause of the disorder. As H. Ford suggests:

> . . . the examining physician must be alert to the mechanism of denial sometimes encountered in the presence of severe organic disease. These disturbed people are seeking reassurance that they have no serious organic disease. In an attempt to cover their major concern, they may describe some trivial complaint or even insist that their symptoms are emotional in origin. . . .
>
> A psychiatric disorder does not preclude the presence of physical disease or admixtures of physical and emotional disorders.[12]

Psychiatric symptoms caused or aggravated by an underlying physical illness may both herald the physical illness and divert the unwary physician from it. As S. A. Sandler reports:

> Mental symptoms may be the first and earliest manifestations of a brain tumor and may precede organic neurologic signs by months or years.[13]

A COMBINATION OF SYMPTOMS

Many clinical syndromes are in fact a combination of interacting psychological and physical symptoms. Examining and treating just the psychiatric or the physical aspects of such combined disorders does not come to grips with the whole problem. As Ford says:

> [The physician] needs a workable knowledge of the autonomic manifestations of persistent anxiety and emotional tension, and of motivations of behavior. He should be familiar with the mechanisms of defense.[12]

The physician, he goes on, should be aware of his personal relationship to the patient—of the fatherly role he plays and of the patient's desire to be dependent. The physician should have knowledge of group psychotherapy and the use of psychiatric drugs.

Further emphasis on the need to treat coexisting emotional and physical disturbances simultaneously is given by J. H. Schultz, who points out that whenever a doctor treats a physical illness he is also treating its emotional aspects. Whether such treatment of emotional aspects is good or bad depends on his grasp of psychiatry.[14]

The physician, then, needs to know psychiatric principles to treat physical illness, and as we have said he also needs to know the patient's family. Patients' symptoms often stem not so much from psychiatric disorders in themselves as they do from disorders in other family members, whose psychiatric symptoms they imitate. Careful examination of both patient and family may show the physician where the illness really lies. In any case, variations in the nature and severity of the patient's symptoms from time to time may reflect changes in the family's emotional situation. Ford believes that the doctor must know such things as what stress producing situations are in the home, and which other family members may need help more than the patient does. Furthermore, when the patient has serious psychiatric illness, understanding the family enables the doctor to induce the family to take adequate suicide precautions, to commit the patient to a mental hospital, or to cooperate in other urgent therapeutic measures.[12]

PATIENT AFTERCARE

This interaction between patient and family is especially important when the patient is discharged from a state or other mental hospital. As S. Folkard has found:

> If the patient returns to live at home when he leaves the hospital, the attitudes of relatives may . . . either reinforce or weaken the patient's attitude and consequently affect his prospects of successful rehabilitation.[15]

The family doctor who knows and understands the family, then, can better trace the origins of the patient's symptoms and emotional difficulties, more effectively enlist the cooperation of the family in his therapy, and more correctly predict the effect that his treating his patient will have on the family. An example of the value of the family cooperating in treatment is provided by R. E. and K. K. Gordon. When treating a woman's emotional reactions to pregnancy, they found that if they could improve her husband's attitude, she would develop fewer emotional problems *post partum,* and that she would recover more quickly from those she did develop.[16]

If knowledge of the patient's family is important to the treatment of his physical and emotional disorders, so is knowledge of the community in which he lives. If he is shunned just because he has a psychiatric illness, if he is not given jobs that he really can handle, if he does not get both social and financial assistance when he needs it, he may remain sick unnecessarily. He may be affected, in fact, even if the community shuns and rejects not him, but his family. When the community has a sophisticated and constructive attitude toward mental illness, on the other hand, it can give him valuable support. This support includes direct financial assistance to tide him and his family over temporary crises; it includes help getting a job; it includes the social backing of his friends, his club, and his church.

THE PHYSICIAN AS MEDIATOR

The family physician, whose daily rounds familiarize him with the community, is usually very well suited to mediate between patient and community. As F. G. Ebaugh stresses, the family physician has a community leadership role that is especially valuable when the patient is being studied diagnostically prior to psychiatric therapy and when he needs follow-up treatment.[17] Gordon and Gordon were able to help young mothers upset by their maternal responsibilities by invoking the assistance of other, more experienced mothers.[16] Ewalt says that depressed patients need sympathetic support from ". . . perhaps even a clergyman or social worker in the community who can give them general counselling."[10]

The family physician can also mobilize formal social resources in the community. To help the patient during the difficult transition between being dependent in the hospital and becoming independent in the community, for example, R. P. Pratt cites the use of foster homes. The discharged patient lives for a time in these foster homes and to an extent participates in family life. Some of the plans for use of foster homes ". . . are offered by welfare agencies, others by voluntary social service groups, but whatever the sponsorship, they are providing an alternative living arrangement . . . that lies between self-care and an institution."[18]

The family physician, says V. Ainsworth, is also well suited to educate the public to accept the mentally ill patient. He urges that employers and unions accept the worker with mental disorders, that sheltered workshops be created to help patients cope with economic problems, and that psychiatric services be made readily available to physician and patient.[19]

VALUE OF MUTUAL SUPPORT

Pratt emphasizes the value of doctor and community supporting one another to care for the patient. In showing the ways doctors can help a community agency, Pratt says that the agency

> . . . requires that a physician certify the [foster] home owner's fitness to assume the added burden of care that taking in a boarder will mean. Doctors are often consulted, too, about special physical and dietary problems, as well as continuing medical care. Among voluntary agencies, physicians' names are prominent in lists of directors.[18]

Ford emphasizes the wide variety of things that a doctor may do in mobilizing community support of his treatment program for the patient. Such help of the patient may extend from the doctor ". . . making a personal loan to tide the anxious patient over financially, to a request that local authorities remove an alcoholic patient from the local brig to the local hospital."[12] The doctor, he goes on, may have to see that community clubs are formed, that working conditions in shops and factories are changed, and attitudes of churches and fraternal groups improved.

CAUSATIVE FORCES

Up to this point, we have seen that the treatment of illness, whether somatic or psychic, must take into account not only emotional and physical events occurring within the patient, but also significant events in his family and in his community. Every symptom is a resultant of several causative forces from physiological, psychological, social, and economic origins. Since these forces occur in different proportions in different patients, or even in the same patient from time to time, and since they act upon one another in a very complex manner, treatment must be applied to each of these causes when needed, and in the correct manner and amount.

Treating each causative force alone, however, is not enough. The integral entity formed by the several parts among themselves must be treated as a whole; each treatment given to one part of the problem must support those treatments given to all others, and at the same time be supported by them. This necessity for a broad approach has brought increasing numbers of physicians to push

so-called integrated treatment. Houston, following this line of reasoning, avers that:

> . . . the patient is one being, and in our comprehensive consideration of his problems we must, of course, assess each factor separately and definitively, and evaluate them all collectively and relatively.[11]

The family physician (1) knows how to treat physical illness, (2) knows the family and enjoys their confidence, and (3) knows the community. As W. W. Fulton says, "The family doctor is uniquely situated to observe the interplay between physical, mental, and social disorders, and must try to cope with all three of them."[20]

ROWEN'S STUDIES

The family doctor not only can treat psychiatric disorders, he very often gets the chance to do so. In this connection, Ewalt reminds us that the family doctor is most often the person who first sees the patient getting sick.[37] When M. J. Rowen counted how many of his patients in a general medical practice had emotional symptoms, he found that in 1,054 consecutive office visits, the predominant complaint or disease was psychotic in 2.1 per cent and neurotic in 16.9 per cent.[21] When one remembers that these percentages apply to patients whose primary problem was psychiatric, and that these figures do not include other patients with significant emotional problems overshadowed by somatic disorders, one gets an idea of the large amount of psychiatric illness first seen by the family physician.

Because of these considerations, Houston concludes that the family doctor should undertake the treatment of a large percentage of medical problems with psychological and social elements.

> A good general practitioner is the person best fitted to make . . . a comprehensive evaluation of the physical, psychological, social, and economic factors in the patient's illness. . . . A general practitioner who knows the patient and his home, his friends, his moods, his problems, and his socioeconomic status will make fewer errors than will be made by a squad of able visiting nurses, social workers, and psychologists.[11]

Upon learning that patients need treatment that integrates physical, psychological and social skills, one's thoughts turn naturally to the family doctor. This doctor is the unique person who has, or can practicably acquire, the knowledge and skills required to identify the needs of most patients, and to meet those needs comprehensively. As Houston says:

> Over 90 per cent of the patients' illness can be treated by a good general practitioner—giving better service, and getting equal or better results, than if treatment and diagnostic services were separated.[11]

Ainsworth supports Houston's position with the words:

> Who else than the general practitioner is usually so well placed in having an intimate knowledge of the patient, his family, and his background? This intimate patient/doctor relationship is outstanding in the diagnosis, treatment, and management of the mentally sick.[19]

There seems to be a growing number of physicians, then, who believe that the family doctor is in a good position to treat emotional disturbances, and that he has almost all, if not all, of the qualifications needed to undertake that responsibility. There are, however, those who believe that the physician who graduated from medical school more than, say, 15 years ago may not have received in school enough psychiatric training to treat even mild emotional disorders. A physician with such defects in his training can fill the gaps, however. Postgraduate psychiatric courses being offered in greater numbers all the time have been useful. Ewalt, for example, recommends that doctors take these short courses or even brief psychiatric residences.[10]

Possibly a course is being given in your locality, or in a city near enough for you to attend it. If none is now available, perhaps one can be started. The physician wanting such training can express his interest to those responsible for postgraduate education. These responsible organizations include the mental health committee of your state Academy of General Practice, the similar committee of your state medical association, and the local American Psychiatric Association District Branch, and, of course, the medical school. Toward this end, the American Psychiatric Association General Practitioner Education Project stands ready to do what it can to help. ★★★

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THE UNSHELTERED WASHINGTONIANS

Washington's theme on the subject of fallout shelters is "do as we say, not as we do," reports *Insider's Newsletter*. The weekly fact sheet says that the Washingtonians, bureaucrats, legislators, and reporters, are talking a lot about shelters and reading the pamphlets but doing practically nothing aside from waiting to see what everyone else does. The White House itself has only a World War II shelter which wasn't too adequate when FDR built it. The President is operating on the theory that he and his family would go to West Virginia in case of attack.

Of the 14 Cabinet and White House officials directly concerned with national security, not one has any kind of a family fallout-shelter arrangement. Not a single Government Building, including the new multi-million-dollar State Department building, has a fallout shelter, although the Government has a set of caves nearby from which it would operate on a somewhat limited scale, presuming the workers ever got there. The Congressmen have made no provision to continue their operations should the Capitol be vaporized some day. About the only first-rate shelter in town is the one at the National Institute of Health in Bethesda, Md. It holds 100 people, could take a direct nuclear hit, and cost $60,000 to build. It was constructed for shelter experiments.

Clinicopathological Conference XXII

Conducted by the Department of Pathology
University of Mississippi School of Medicine

CPC XXII involves a 2-day-old full-term infant who was admitted to the University Hospital with respiratory distress and some cyanosis. Discussers are Drs. David Watson, Robert D. Sloan, Blair E. Batson, Joel Brunson, and Thomas R. Arlander.

Dr. David Watson: "This 2-day-old, 8 pound, 13 ounce white female infant was admitted on Sept. 3, 1960. She was definitely a full-term infant. The only available history was that she was known to have had an immediate cry and respirations at birth, and shortly thereafter began having respiratory distress. On the morning of admission she was known to have been cyanotic. No information could be obtained regarding pregnancy, delivery, or family history. So this was a 2-day-old full-term baby with respiratory distress and some cyanosis.

RESPIRATORY DISTRESS SYNDROME

"When a newborn baby has respiratory distress, we think of what is now being called respiratory distress syndrome, a term which is being used since hyaline membrane disease is a pathologic diagnosis. We have been calling generalized pulmonary disease in the early newborn period the respiratory distress syndrome, to include hyaline membrane disease, congestive pulmonary failure (which is hyaline membrane disease without hyaline membranes), and generalized atelectasis. I do not really think that this baby falls into this category too well. Usually by 48 hours of age they are improving or else dead. They usually have predisposing factors such as cesarean section, maternal diabetes, or more frequently, prematurity.

"Physical examination on admission revealed a well-developed, female infant, who was cyanotic and had a weak cry. The chest was noted to be emphysematous, with marked retractions, and the respiratory rate was 60 to 70 per minute, which is certainly increased. Poor aeration and dullness to percussion were found in the right chest. I assume that there were not any rales or rhonchi heard. The point of maximum impulse was found in the right fourth intercostal space, so that it was felt that the heart was on the right. No murmurs were noted. The apical rate was 150 per minute, which is not unusual for a baby of this age. There is no note regarding the peripheral pulses or blood pressure. I don't know if there is any further information available on that or not. There was no evidence of edema, and the skin appeared normal.

"The impression on admission was respiratory distress syndrome, with congenital heart disease and dextrocardia. Cyanosis plus dextrocardia certainly makes one think of congenital heart disease, but it must be remembered that cyanosis is a very nonspecific finding, and can be found in central nervous system disease, severe pulmonary disease, and congenital heart disease. Cyanosis can be found in a newborn with heart disease of a type which is usually cyanotic in older individuals, and conversely severe cyanotic malformations may not be cyanotic in a newborn. Perhaps this is a good time to show the chest x-rays."

CHEST X-RAYS

Dr. Robert D. Sloan: "PA and lateral views of the chest were obtained, but there is fairly little that we can say from the diagnostic standpoint about the status of the heart, great vessels, and the lungs. The heart borders are not well defined, but it is reported that the heart lies farther to the right than is usual. The lungs are not well enough aerated to permit one to clearly differentiate between the borders of the heart and the adjacent lung tissue. The pattern that we see in the lung could be due either to a so-called miliary atelectasis or hyaline membrane disease in the newborn, but these are not truly x-ray diagnoses. There is an anomaly of the sternum, with this

structure being more ossified than is customary in its lower portion. The only statement that I could find in any of the standard texts referring to such an anomaly was that occasionally in congenital heart disease the sternum appears to be more developed and have more ossification than in the normal baby. In summary, there is no way from the films at hand to ascertain the status of the heart or the exact nature of the changes in the lungs."

Dr. Blair E. Batson: "As to the shadow to the left of the spine, do you think that it is aorta or can you tell?"

Dr. Sloan: "I cannot be sure."

Dr. Batson: "Is there any evidence as far as you are concerned which would fit with the clinical impression of emphysema?"

Dr. Sloan: "No, I do not believe I would have used that term simply because of the relative poor aeration. It is true that the overall volume of the thorax is not diminished."

ELECTROCARDIOGRAM

Dr. Watson: "The electrocardiogram shows two chief things: The QRS axis is deviated well to the right, at about −150° and there is an inverted P wave in Lead I, which is an important thing to look for when the heart is on the right side of the chest. This is because the direction of the P wave in Lead I indicates which way the atria are being activated. When the atria are normally situated, the sinus node is situated on the right and the activation of the atria is from right to left. When the atria are inverted or you have a right atrium and presumably the sinus node on the left, and the left atrium is on the right, then the activation is from left to right and there are negative P waves in Lead I. This is not an absolute rule, almost all true dextrocardias with situs inversus have this, but on the other hand there are a number of other individuals including people with structurally and positionally normal hearts who have a negative P wave in Lead I. One of the things that will do this is a coronary sinus type of rhythm."

HOSPITAL COURSE

"The patient was placed in an isolette with moist oxygen, and was digitalized. An apneic episode occurred two and one-half hours after admission and endotracheal intubation was carried out with some improvement, but she later died. The digitalization could have been carried out because of clinical impression of respiratory distress syndrome with rapid respiratory rate and poor aeration, or could have been done on the basis of suspicion of congenital heart disease with impending failure. There were no real findings in this protocol to indicate that the patient was actually in failure. The liver was not palpable. The heart rate was relatively normal for a baby of this age and in this distress. The only thing that you could put your finger on was an increased respiratory lead which was certainly not specific for heart failure, so there is no real indication that that was present, but it could have been.

PERTINENT QUESTIONS

"This protocol and these findings bring up several questions. The first thing we like to ask is whether there is a primary intrathoracic anomaly or disease which is secondarily producing a dextrocardia or whether this is a congenital malformation of the heart with dextrocardia and secondary involvement of the lung, or whether we have two relatively separate conditions.

"There was an excellent review of congenital dextrocardia in the January, 1961 *Journal of Pediatrics*[1] by Dr. B. M. Gasul of Chicago. By congenital dextrocardia he means all dextrocardia which is not due to something acquired, such as an acquired pneumothorax. It seems everyone has his own classification of dextrocardias. He has divided dextrocardia into different types. Type I is the true mirror-image heart with the left atrium and the left ventricle on the right and the right atrium and right ventricle on the left. This is always associated with a complete or partial situs inversus.

DEXTROCARDIA TYPES

"In types II and III the heart is formed on the right and may have inversion of some but not all of the chambers. Type II, with cardiac dextroversion and no chamber inversion, he subdivides according to whether the dextroversion is complete (in which case the apex is 40° or more away from the midsagittal plane to the right) and an incomplete one (in which it is less than 40° away from the midsagittal plane). Type III has what he calls a mixed dextrocardia in which the heart is formed on the right and there is some chamber inversion. In one type you have atrial inversion and in the other type you have ventricular inversion. Group IV shows what he calls congenital dextroposition, in which the heart has the apex to the left, and the chambers are in their usual

position, but the whole heart en masse has been shifted somewhat to the right of the midsagittal line.

POSSIBLE DEFECTS

"Group V indicates extrinsic dextrocardia in which the heart is formed in the usual position but some other anomaly or defect has caused a shift of the mediastinal structures including the heart to the right. We might just discuss those possibilities for a minute. There are a fair number of things that will do this. The first is skeletal deformities of the spine and vertebra like kyphoscoliosis. We can dismiss this pretty well on the basis of x-ray findings. Another thing that will do this is either a diaphragmatic hernia or eventration of the diaphragm which also can be ruled out on the basis of the x-ray. Severe atelectasis, or congenital aplasia or hypoplasia of the lung can also cause a shift of the mediastinal structures. Congenital aplasia or hypoplasia of the lung twice as commonly involves the left lung rather than the right, and twice as commonly involves males rather than females. Congenital cystic disease can cause shift of the heart to one side or the other as can congenital lobar emphysema. Dr. Gasul found a surprising number of cases of aberrant systemic arteries supplying various portions of the lung which were smaller than normal and associated with a shift of the heart to the right. Of course, pleural effusion and pneumothorax can also shift the heart to the right. Most of these conditions can be ruled out by the x-rays that we saw with the exception of the atelectasis or maybe possibly the aberrant systemic arteries of the lung because they do not present a particularly characteristic picture unless you use contrast media. Also I think that the negative T-waves in Lead I on the electrocardiogram do point to some basic cardiac involvement. There was some evidence of hypertrophy of the ventricle on the right, but this is pretty hard to read in malpositions and I would not like to rely on that too much."

LUNGS

"It is rather difficult, as Dr. Sloan has pointed out, to comment about just what is going on in the lungs. The lung fields would seem to show increased pulmonary vascularity or change in the pulmonary parenchyma such as might be found in hyaline membrane disease. The x-rays also showed that the stomach bubble is on the left and the liver is on the right, so there certainly is not complete situs inversus. So this leaves us discussing what you expect to find in so-called isolated dextrocardia.

"In these patients there is a high incidence of severe cardiac anomalies especially if the dextroversion is complete with the apex well to the right. I don't think anybody can really say where the apex is in this patient although clinically it was thought to be on the right. The protocol does not say how far to the right in the fourth intercostal space the apex beat was felt. These are mostly cyanotic anomalies and the commonest ones are tricuspid stenosis or atresia (half of these will have pulmonary stenosis or atresia and reduced pulmonary blood flow); single ventricle (these very often have pulmonary stenosis with reduced blood flow, or transposition of the great vessels); and transposition of the great vessels with or without septal defect. Less commonly we have tetralogy of Fallot, and atrio-ventricular valve anomalies. These patients usually all present with dextrocardia, cyanosis, most commonly reduced pulmonary blood flow and right ventricular hypertrophy. This would fit this patient fairly well except that the blood flow certainly does not look to be reduced. So whatever is in there may well include a left-to-right shunt or transposition of the great vessels.

DISCUSSER'S DIAGNOSIS

"I would guess that the clinical findings of poor aeration and other changes in the lung, and the x-ray findings in the lung fields related to the x-ray finding to an increased blood flow, and perhaps the difference in the clinical findings between the right and the left is due to the apparently rather enlarged heart. If I had to make a diagnosis, I would suggest isolated dextrocardia with a cyanotic type of heart defect with increased blood flow—perhaps single ventricle with transposition of the great vessels. However, in this situation it is largely a guessing game, and I would not be surprised at anything."

Dr. Joel Brunson: "Are there any other comments? Dr. Batson, do you have any additional comments?"

Dr. Batson: "I just would like to comment on one thing about pulmonary hyaline membrane disease. The radiological picture is often one which seems to be atelectasis on viewing the lung parenchyma alone but further inspection reveals a normal thoracic size instead of the collapsed size which is often associated with atelectasis."

Dr. Brunson: "In many ways this case is a curiosity which is one of the reasons why we presented it, knowing full well that there wasn't anything in the protocol that would allow one to make a specific diagnosis. Dr. Arlander, who did

the autopsy, will review for us what he has been able to find in the literature regarding this condition."

POSTMORTEM REPORT

Dr. Thomas R. Arlander: "At postmortem the child was well developed and at full term. It weighed approximately 4,000 gm. There was marked cyanosis about the head, neck, and the extremities. The peritoneal cavity contained about 200 cc. of clear straw-colored fluid and there were no abnormalities of rotation of the gut or position of the viscera. When the chest was opened, the pericardial sac was the first thing that was encountered and at first glance appeared to occupy the entire chest cavity. It contained about 150 to 200 cc. of serosanguinous fluid, an exceedingly large amount of fluid for a small chest. The main bulk of the heart mass was in the right chest. The apex pointed anteriorly and toward the right and by Dr. Watson's criteria would qualify as a dextroversion, I believe. There was no mirror-image inversion of the chambers. The venous side was on the right and the arterial side was on the left. The right lung was found to be almost totally collapsed and hidden behind the large pericardium on the right. The left lung was slightly more expanded and appeared to have some air within it. Each lung was surrounded by about 50 cc. of clear yellow fluid. The heart itself was the most curious aspect of this case. The dextrocardia was not of a mirror-image type and there is no indication as to why this heart was lying over on the right side as it was. At the apex of the left ventricle there was a small mass approximately 1 cm. in diameter which was firm.



Figure 1. Gross photograph of the heart showing the two interventricular septal defects. The cystic structure described in the text is seen just above the metric rule.

"The wall of the right ventricle was markedly thickened to about 0.5 cm., but the pulmonary valve was grossly normal. There was no evidence of stenosis of the infundibulum or the valve. A rather large patent ductus arteriosis, which measured 0.5 cm. in diameter, was present. The left ventricle was thickened and there were two interventricular septal defects. A small hole about 0.5 cm. in diameter was present at the apex as well as another septal defect in the high membranous septum measuring 4 mm. in diameter. At the apex of the left ventricle was a diverticulum about 1 cm. in diameter. It connected with the ventricle through a small sinus tract. There was no blood in this space but a clear greenish yellow fluid. The wall of this object was 1 mm. thick and quite fibrous. The other organs grossly were unremarkable except for the liver which perhaps was a little bit congested.



Figure 2. Photomicrograph of cardiac cyst wall showing fibrous connective tissue and elastic fibers. Elastic tissue stain.

"The microscopic features of this heart are unusual. The diverticulum wall was composed of a combination of fibrous connective tissue and elastic fiber. It resembled rather poorly organized aortic tissue. Outside of the cyst there were a few fibers of more normal heart muscle and outside of that a very thickened layer of epicardium. In the diverticular wall itself there was no discernable muscular element. The lining of this structure had a well-defined but thickened endocardial lining. Another interesting finding was the presence of an

extremely thickened epicardium. Grossly this appeared as a pearly white coat and microscopically was composed of well-organized connective tissue with a good vascular supply. It has a single layered mesothelial covering and beneath it there was a strange accumulation of pigment. The pigment was in a band just beneath the surface and was present in the form of droplets. This was interpreted as representing old hemorrhage. We don't know what the relationship between this finding and the defects is.

PRIMARY DIAGNOSES

"This is an unusual and somewhat unexplainable case. The primary diagnoses were first of all dextrocardia associated with patent ductus and two septal defects, one being high in the septum and one being low. Congenital defects, as Dr. Watson said, are expected in cases of dextrocardia. The apical cyst or diverticulum, the most unusual aspect of the case, was associated with this extreme hydropericardium and a chronic nonspecific pericardial thickening. There is no good explanation for the polyserous effusions in various cavities of the body, but it may very well be related to the congenital defects and cardiac failure. The pericardial effusion was slightly different in character in that it was somewhat bloody. We know the child did not receive intracardiac drugs at the time of death. The remaining pigment in the old connective tissue suggests that at some previous time there had been hemorrhage into the epicardium, and we wondered if this might not have been secondary to one of two things. Perhaps at some time during fetal life the hemorrhage had occurred secondary to trauma associated with the intrinsic position of the heart. The apex of the heart was firmly adjacent to the anterior chest wall and with consistent beating of the ventricle it is possible that this may have created some trauma to the epicardium. Another possibility was that this child might have had some infectious disease some time during the fetal period, but this is purely speculation. We have no cultural evidence of this.

CYSTS OF THE HEART

"An apical cyst or diverticulum is a very unusual thing. There are very few reports in the literature concerning cysts of the heart or diverticula of the heart. Congenital epithelial-lined cysts have been found in almost every conceivable position in the heart. Almost every recorded case that you find has a different location. They usually are lined by stratified squamous or columnar epithelium and the most frequent location is within the atrial septa or in the muscle near the AV valve ring on the left side. These cysts are thought by embryologists to represent heterotopic inclusions of entodermal tissue into the myocardium which occurs at some early point in embryonic life, presumably at a time when the heart has bilateral primordia and the cardiac tissue is near the head of the embryo and in very close relation to the foregut. Of course, no one really knows. Some people also believe that epithelial lined cysts can develop out of mesenchymal tissue itself. A persistence of the early 'sponge like' consistency of the myocardium might occur followed by development of an epithelial lining.

CASES IN THE LITERATURE

"In searching through the literature I found four or five cases of cysts of the heart with columnar epithelium and several cases of cardiac cysts with squamous lining. Usually the cysts are completely isolated from the ventricular atrial chambers and are found incidentally at post. This case of ours is somewhat different, however, because we did not find a stratified squamous or a columnar epithelial lining. The cyst wall in this case is lined by a thickened endocardium which is directly continuous with the endocardium of the heart itself. It contains the three layers of the heart wall. These are the endocardium, some fibers of myocardium, and epicardium. We have no basis for assuming that this cyst is the result of some embryonic inclusion of the entodermal tissue because we don't have epithelial elements within the cyst.

REPORTS OF DIVERTICULA

"This brings up another type structure which has been described in various cases, diverticulum of the left ventricle. This lesion is quite rare, but not nearly as rare as epithelial-lined cysts. Until 1951, only 14 cases had been reported in the literature. They usually occur at the apex of the left ventricle as this particular structure did. Quite often they occur as finger-like projections, extending through the diaphragm to the level of the umbilicus and present as a pulsating mass. Of the ones that have been reported, a good many of them were found at postmortem following rupture.

"The embryology of cardiac diverticula is not known. Some people think that they may represent a developmental instability at the apex of the heart, but this is really not saying much. Occasionally they are said to communicate between

the right and left ventricle through the low septal defect which is what occurred in this case. They are almost always associated with congenital heart defects. I found one case of multiple diverticula in the left ventricle which were thought to be heterotopic inclusions of aorta tissue in a patient with tuberculosis, but in looking at our slides we have no evidence of this. There was only one other case in the literature that I could find that was at all similar to what we have and this was reported in 1940 by Bayer. I can't quite make up my mind whether this is a cyst or diverticulum. Maybe it is something entirely different. At any rate, it is a very unusual malformation which we do not understand. We thought it would be worth presenting."

Dr. Sloan: "Did you study the sternum at all?"

Dr. Arlander: "I don't recall what the sternum looked like. It seems to me that this was a bifid sternum though."

Dr. Sloan: "You stated that the epicardium was greatly thickened. What about the pericardium?"

Dr. Arlander: "I don't have sections of the pericardial surface."

Dr. Sloan: "Did it grossly appear to be greatly thickened?"

Dr. Arlander: "It did. It looked just like the epicardium."

Dr. Sloan: "Would you be interested in toying with the idea that in early embryologic life there might have been an actual communication between the ventricle and the pericardial sac and that later in the development this tract closed off forming the diverticulum? This might account for the peculiar appearance of the pericardial cavity and its walls."

Dr. Arlander: "This is a possibility which we had not considered." ★★★

2500 North State Street

REFERENCES

1. Gasul, Benjamin M., and Arcilla, Rene A.: Congenital Dextrocardia, J. Pediat. 58:39 (Jan.) 1961.

THE SOUND BUT NO FURY

Those rumors of corkscrew-shaped vaccination needles that run down the lines of camp-fresh Army recruits may soon go the way of the cavalry horse. Newest thing is injection by ultrasonic wave rather than the fearsome hypodermic. Two physicians from the University of Pennsylvania reported to the American Chemical Society that they had used an ultrasonic wave generator to force hydrocortisone some two inches into body tissue. An ointment was first rubbed into the skin. The wave "gun" was then turned on the spot and the injection made. One of the advantages of the new system, the physicians reported, was that by using different-sized nozzles on the wave "guns," the doctor can select the size of the area he wants the medication to penetrate.

—*The Insider's Newsletter*

MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Nov. 27-30, 1961, Denver, Colo. F. J. L. Blasingame, Executive Vice President, 535 N. Dearborn St., Chicago 10, Ill.

American Academy of General Practice, April 6-13, 1962, Las Vegas, Nev. Mr. Mac F. Cahal, Executive Director, Volker Blvd., at Brookside, Kansas City 12, Mo.

Southern Medical Association, Nov. 6-9, 1961, Dallas, Texas. Mr. Robert F. Butts, Executive Secretary, 2061 Highland Ave., Birmingham, Ala.

STATE AND LOCAL

Mississippi State Medical Association, May 8-10, 1962, Jackson. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson.

Amite-Wilkinson Counties Medical Society, First Tuesday March, June, September, December. S. E. Field, Centreville, Secretary.

Central Medical Society, First Tuesday Monthly, 6:30 p.m., Robert E. Lee Hotel, Jackson. George E. Gillespie, 514-A East Woodrow Wilson Drive, Jackson, Secretary.

Claiborne County Medical Society. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Second Wednesday March and November, 2:00 p.m., Clarksdale. Robert R. McGee, 150 Yazoo Ave., Clarksdale, Secretary.

Coast Counties Medical Society, First Wednesday March, June, September, and November. Charles N. Floyd, 1412-23rd Ave., Gulfport, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday January, April, July, and October, 1:00 p.m., Hernando Motel Cafe, Hernando. L. L. Minor, Route 9, Memphis 9, Tenn., Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. A. Wayne Sullivan, 1204-21st Ave., Meridian, Secretary.

Homochitto Valley Medical Society, Fourth Tuesday Monthly, 7:30 p.m., Natchez Country Club, Natchez. W. T. Colbert, Natchez General Hospital, Natchez, Secretary.

North Central District Medical Society, Second Wednesday March and September. W. A. Middleton, 214 Summit St., Winona, Secretary.

Northeast Mississippi Medical Society, Second Tuesday March, June, September, and December, Tupelo. Thomas W. Wesson, 421 Main St., Tupelo, Secretary.

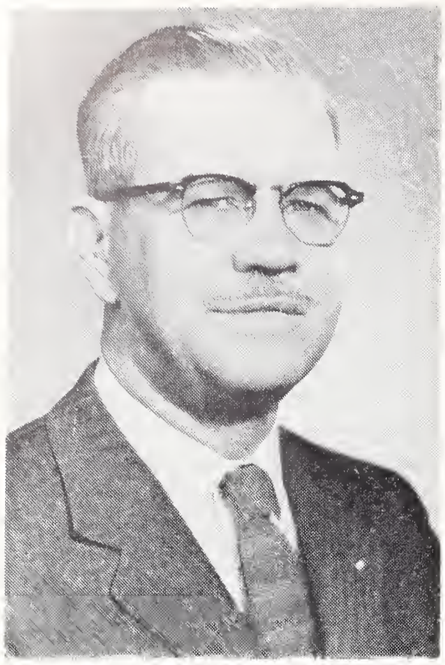
North Mississippi Medical Society, First Thursday January, April, and October, Oxford. R. L. Wyatt, Holly Springs, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. Samuel O. Massey, Jr., 220 E. Canal St., Picayune, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. Thomas F. Puckett, 715 Arledge St., Hattiesburg, Secretary.

Tri-County Medical Society, Second Tuesday March, June, September, and December. A. V. Beacham, Magnolia, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Tom H. Mitchell, The Street Clinic, Vicksburg, Secretary.



The President Speaking

'The Screen Needs Cleaning'

LAWRENCE W. LONG, M.D.
Jackson, Mississippi

THE ELECTRONIC PICTURE in America's living room is becoming one of the most controversial quantities of the time. And it's a matter of concern to physicians, too, because of the frankly adverse psychological effect sometimes produced by entertainment of questionable taste and content as well as potential health dangers implicit in TV's uninhibited advertising techniques with respect to proprietary remedies. Sooner or later, somebody is going to do something about the seamy side of this dynamic and obviously useful medium.

Brutality, murder, mayhem, and violence are nightly features of entertainment for tens of millions of Americans. Surely, the Roman circus bows to television only to the extent of audience coverage. Responsible leadership in government, education, religion, and medicine has not been reluctant to deplore the sad state of programming and merchandising to which consumer products industries using TV have found it appropriate to resort.

Then there are the pills, tonics, ointments, and liniments—all but putting the medicine show of yesteryear into a category of modesty and restraint. Proprietary remedies are big business and their selling methods via video may not always be in the best interest of the nation's health.

Mr. Newton N. Minnow, chairman of the Federal Communications Commission, says of television, "It is not enough to cater to the nation's whims—you must also serve the nation's needs." He has expressed frank concern over program content, as he puts it, "Blood and thunder, mayhem, violence, sadism, murder, Western badmen, Western goodmen, private eyes, gangsters, more violence, and cartoons."

Reluctantly, LeRoy Collins, ex-governor of Florida turned president of the National Association of Broadcasters, echoes Minnow: "The basic commitment of the TV industry is to advance the public good and if any program is an influence for debasement and contrary to public welfare, regardless of how popular, in my opinion, its public broadcast cannot be justified."

Many physicians will agree that the screen needs cleaning. ★★★

JOURNAL OF THE
MISSISSIPPI STATE
MEDICAL ASSOCIATION

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EDITORIALS

Let's Pay the Bill—Voluntarily!

W. E. CALDWELL, M.D.
Baldwyn, Mississippi

THERE IS NO SUCH THING as a price upon human life and no person is better qualified to make this assertion than a doctor of medicine. Yet, if there were an economic assessment upon the *conservation* of human life, the first figure in the ledger would be the cost of medical education. In the pre-Flexner era when it was sometimes difficult to distinguish between diploma mill and legitimate medical school, the cost of training a physician was hardly more than subsistence and personal maintenance. The student, often undergoing preceptorship, was often the doctor's liveryman as well as trainee. A series of lectures in a formal curriculum scarcely constituted an insuperable economic barrier to the aspiring physician.

The end result of the process is the final test and today's graduate from an accredited American medical school is the proof of the academic pudding. He has training which could not have been purchased for any price half a century ago and he possesses scientific skills and professional knowledge which have literally extended the human lifespan nearly 25 years since 1900. But the process is costly and the institutions able to provide this training are sorely pressed for funds.

Tuition fees pay only a little more than one-sixth the cost of a medical school's operating expenses. Add to this the vital activity of research and the bill mounts. Examine the listings of unfilled faculty positions and recognize the cold fact that inadequate salary schedules are less than enough to attract and hold the competent teacher every such institution must have. And what about plant replacement, expansion to meet present and future needs, modernization of academic and clinical facilities, new and expensive equipment, and a host of ever increasing costs perplexing those who have the responsibility of guaranteeing quality medical education?

Obviously, the bill is going to be paid but physicians should be deeply concerned over who will do the paying. During every session of the Congress for the past 10 years, there have been legislative proposals for federal aid to medical education. Most doctors feel that this remedy, if indeed it is such, carries with it seeds of destruction for what the federal government subsidizes it also controls.

The American Medical Education Foundation is an important beginning step toward providing a *private, voluntary* solution to many of the economic problems facing our medical schools. Mississippi physicians have supported these annual campaigns with progressively greater generosity during the 10 year life of the program. At the 93rd Annual Session of the association last May, a sub-

Chairman, Committee on American Medical Education, Mississippi State Medical Association.

stantial check from AMEF was presented to our University of Mississippi School of Medicine.

The 1961-62 AMEF campaign has begun in Mississippi. It is an appeal to individuals to assist in a cause which gave them professional status. It is a product which should need no selling. Join today and cast a ballot for freedom in medical education—you'll find the blanks ready for marking in your checkbook. ★★★

West Main Street at Highway 45

How Sacred Is the Cow?

Is there a new philosophy on the American political scene as to what constitutes a state of indigency? Are those with leadership responsibilities in municipal and state government reappraising old concepts about welfare expenditures, almost to the extent of ignoring the distinctly liberal trend in their federal counterparts?

Not altogether, by any stretch of anybody's imagination, nor is such a groundswell anything like apparent. But there is a ripple upon the otherwise placid and sometimes stagnant waters of political practice and custom close to home. Not merely is this phenomenon worthy of comment within the framework of medical socioeconomics but it literally demands examination by physicians who have a substantial stake in whatever government does at any level in the sponsorship and financing of public health care programs.

The first stone splashed the water at Newburgh, N. Y., when municipal authorities decreed a no-welfare-if-no-work policy for physically able recipients of public welfare funds. The effect was barely short of sensational. It caught the imagination, interest, and attention of conservative and liberal alike—but not exactly in the same way.

Then came the recently organized Southern Association of Municipal Officials, described as a rebirth of genuine grassroots conservatism. Without saying it in so many words, community leaders from nine states echoed the Newburgh philosophy by dedicating their new movement to greater local management of public affairs, fostering free enterprise, and encouraging individual initiative and self-reliance.

And now, in Mississippi's own back yard, the General Legislative Investigating Committee may have lit the fuse on a similar social bombshell. In a report which will be presented before the 1962 regular session of the legislature, the committee has recommended that relatives of indigent patients hospitalized in state-owned medical and related facilities share the burden of care costs where possible. The report goes further than generalities: It asks the legislature to enact statutory investigative authorities under which a determination of ability to pay can be made.

All of which is to say that welfare may be a not-so-sacred cow politically and another happy corollary could, through economies achieved, put new meaning in medicine's policy of helping only those who need help.—R.B.K.

Half Time in The Congressional Game

Senators and representatives have called it quits for the First Session of the 87th Congress, leaving Washington to simmer in its New Frontier juice until January. The lawmakers hung up a number of records, not the least of which was one for endurance. They *did* give the new administration more than half of its liberal legislative program but they did *not* enact the King-Anderson compulsory health care bills for the aging nor did they put physicians under mandatory Social Security.

Almost nobody is totally satisfied with the record. The Chicago *Sun-Times* commented editorially that ". . . the Democratic Congress that gleefully assembled in Washington last January, with one of its own in the White House for the first time in eight years, is preparing to go home this week in a far more sober mood." The press giant and less-than-conservative voice of the city, the New York *Times,* said, "The 87th Congress, meeting in a year that cried for new dimensions in statesmanship, has responded with something less than greatness."

If nothing else were accomplished, the solons gave the paper and printing industries a boost. There were 14,026 bills introduced and the Congressional Record for the session contained 29,-034 pages. Exactly 555 bills were of interest to medicine. The American Medical Association submitted statements on nine of these: four in favor, three in opposition, and two for information. The Mississippi State Medical Association concentrated its firepower on the King-Anderson proposal in a massive, seven month program culminating in presentation of testimony. Other statements were, of course, submitted.

But this is only half time in a serious national ball game where more than a conference title is up for grabs. And mere spectators aren't enough. —R.B.K.

Book Reviews

The Cardiac Arrhythmias. By Dr. Brenden Phibbs of the Casper Clinic, Casper, Wyoming. First edition. Cloth, 128 pages, with illustrations. St. Louis: C. V. Mosby Company, 1961. $7.50.

Upon first examining this book for review the question immediately raised is, "Why another book on cardiac arrhythmias?" This question is both anticipated and answered by Dr. S. Gilbert Blount Jr. of the University of Colorado Medical School in a pertinent and appropriate foreword. Explaining that this volume presents an unsophisticated and straightforward approach to the electrocardiographic interpretation of the more common arrhythmias, Dr. Blount further points out that it is directed particularly toward general practitioners, anesthesiologists and surgeons who must frequently face the problem of emergency recognition and treatment of cardiac arrhythmias. At the same time these people do not have the opportunity of extensive training in and full understanding of the field of electrocardiography.

While far from being a complete treatise on cardiac arrythmias, the condensation and simplification of the subject material makes this text an excellent review for the medical specialist and an easily understood guide for student and cardiology neophyte. Dr. Phibbs' numerous illustrations make the limited text easily understandable. Particularly helpful is the use of electrocardiographic tracings superimposed on schematic drawings of the heart with origin and pathways of each type of arrhythmia.

The text first presents a brief review of the anatomy and physiology of heart conducting tissues and the basic measurements in the electrocardiogram. This is followed by more detailed coverage of the various normal and abnormal rhythms touching on mechanism, causes, significance, diagnosis and treatment. Of special interest to surgeons and anesthesiologists is a chapter entitled "Fatal Arrhythmias—Operating Room Emergencies." A brief chapter on clinical diagnosis of arrhythmias and a group of "exercise" tracings with answers for self-testing and practice conclude the volume.

In 128 pages Dr. Phibbs has admirably covered a difficult subject in a clear and concise manner that is both readable and informative. This book is a "must" for any clinician or student who has any need for better understanding of the vagaries of heart rhythms and their management.

EUGENE M. MURPHEY III, M.D.

A Manual of Cutaneous Medicine. By Donald M. Pillsbury, M.D., professor and chairman of the department of dermatology, University of Pennsylvania School of Medicine; Walter B. Shelley, M.D., Ph.D., professor of dermatology, University of Pennsylvania School of Medicine, and Albert M. Kligman, M.D., Ph.D., professor of dermatology, University of Pennsylvania School of Medicine. 430 pages, illustrated. Philadelphia: W. B. Saunders Company, 1961. $9.50.

It is difficult to condense knowledge—dermatological or otherwise. The authors realize this. They discuss in detail a few common diseases and mention in passing a few less common diseases. The least common skin diseases are not even mentioned.

The first chapter is well worth reading because it covers without embellishment the anatomical, physiological, and chemical factors in diseases of the skin. This information is difficult to obtain without reading more verbose chapters in standard textbooks of dermatology.

Dermatitis is the longest chapter and appropriately so since this is the most common problem in dermatology. Generally speaking, the illustrations are poor and even though they are meant to illustrate a point they are either poorly reproduced or in poor focus. One outstanding feature of the book, however, is the use of drawings to illustrate the authors' concepts of various skin diseases.

Treatment is mentioned but hardly in enough detail to be helpful. The formulary at the end of the book does not add much to the treatment information given. The authors are therapeutic nihilists which does not help the practitioner at all.

The final chapters get shorter and shorter, and if it were not for the illustrations, the book would

be less than half as thick as it is. As a matter of fact, there is not much of it to begin with.

CHARLES W. CACCAMISE, JR., M.D.

Domestic Journals

Los Angeles Suicide Prevention Center. Robert E. Litman, M.D.; Edwin S. Shneidman, Ph.D.; and Norman L. Farberow, Ph.D.: Am. J. Psychiat. 117:1084 (June) 1961.

The writers present a brief review of the activities of a suicide prevention center in a metropolitan area. The center was set up to demonstrate the relationship between such centers and other community mental health agencies, to serve as a pilot project for other communities to observe, and to collect research data on the etiology, meaning, and prevention of self-destruction. The authors point out that there had been no reports in English of comprehensive and systematic suicide prevention projects.

The principal activities of the center are centered around four areas—first, the provision of intensive study of the suicidal person; second, making the appropriate therapeutic recommendations and referrals; third, consulting with the various community agencies and individual physicians confronted with special problems of suicide; and fourth, the collecting and analyzing of data.

The writers call attention to the fact that the great majority of persons who commit suicide make their intentions known through threats, other suicidal attempts, and certain specific behavior patterns. The problems in evaluating the numbers of such patients are noted. The writers estimate that they were able to get some data at least on almost half the suicidal attempts in Los Angeles in the year 1957. The writers point out that many persons who made suicidal attempts or threats appeared to have a very low potentiality for suicide. This group contained the immature individuals whose actions frequently were impulsive and usually occurred in close proximity to other persons, often when anger would have been appropriate. In this group the role of the suicide prevention center has been to reassure the agency against the danger of suicide and to act in the capacity of a consultant. The center reports a number of persons whose suicide potential was considered moderate, in which the individual made provisions for being rescued. This group was characterized by their involvement in very close ambivalent (love and hate mixtures) interpersonal relationships on which they were quite dependent. The group noted that high suicidal potentiality was associated especially with severe depression, the restless schizophrenic patient, and alcoholics who had exhausted their emotional resources.

The authors note that the resistance to the idea of psychiatric hospitalization was common, especially in the relatives and families of these patients and that the sooner they were interviewed, the better chance there was of successful handling. The writers emphasize several questions frequently asked by community agencies desiring to set up such a service. An interesting aspect of the center's work with the Los Angeles coroner was described in which there was often a "psychological autopsy" held in which the information was gone over more specifically to determine if a death resulted from a suicidal act. The authors felt that many actual suicides were reported as accidents.

In summary, the authors present briefly the benefits which might accrue from a suicide prevention center which is well worth noting particularly by agencies which deal in matters of public mental health.

L. C. HANES, M.D.

Books Received

JOURNAL MSMA has received the following books for review. Selections will be made for more extensive reviews in the interest of the readers and as space permits. Further information on the books listed will be furnished on request. Physicians are urged to submit reviews of additional books which, in their opinion, merit comment.

Traitor Within: Our Suicide Problem. By Edward Robb Ellis, reporter for the New York *World-Telegram & Sun,* and George N. Allen, reporter for the *World Telegram & Sun.* Cloth, 237 pages. Garden City, New York: Doubleday & Company, 1961. $3.95.

Mayo Clinic Diet Manual. By the Committee on Dietetics of the Mayo Clinic. Third Edition. Cloth, 222 pages. Philadelphia: W. B. Saunders Company. $5.50.

Pathologic Physiology, Mechanisms of Disease. Edited by William A. Sodeman, M.D., dean and professor of medicine, Jefferson Medical College. Third Edition. 1182 pages, illustrated. Philadelphia: W. B. Saunders Company, 1961. $15.00.

The Cervix Uteri and Its Diseases. By C. Frederic Fluhmann, M.D., chief of obstetrics and gynecology, Presbyterian Medical Center, San Francisco, Calif., and clinical professor of obstetrics and gynecology, Stanford University School of Medicine, Palo Alto, Calif. 556 pages, illustrated. Philadelphia: W. B. Saunders Company. $14.00.

Respiration in Health and Disease. By R. M. Cherniack, M.D., assistant professor of medicine, University of Manitoba School of Medicine, director, respiratory division, clinical investigation unit, and assistant physician, Winnipeg General Hospital, and L. Cherniack, M.D., assistant professor of medicine, University of Manitoba School of Medicine, associate physician, Winnipeg General Hospital. Illustrated by Nancy Joy, assistant professor of medical illustration, University of Manitoba School of Medicine. 403 pages. Philadelphia: W. B. Saunders Company. $10.50.

Preventive Medicine in World War II—Communicable Disease, Volume V. Edited by Colonel John Boyd Coates, Jr., M.C., editor-in-chief, Ebbe Curtis Hoff, Ph.D., M.D., editor for preventive medicine, and Phebe M. Hoff, M.A., assistant editor. Leather, 530 pages. Washington, D. C.: Office of the Surgeon General, Department of the Army, 1960. $5.75.

The Stages of Human Development before Birth, An Introduction to Human Embryology. By E. Blechschmidt, M.D., professor of anatomy, director of the Institute of Anatomy, University of Gottingen. 684 pages. Philadelphia: W. B. Saunders Company, 1961. $23.00.

Pathology. By W. A. D. Anderson, M.D., professor of pathology and chairman of the department of pathology, University of Miami School of Medicine, director of the pathology laboratories, Jackson Memorial Hospital, Miami, Fla. Fourth edition. 1389 pages with 1385 illustrations and seven color plates. St. Louis: The C. V. Mosby Company, 1961.

Thoracic Diseases, Emphasizing Cardiopulmonary Relationships. By Eli H. Rubin, M.D., professor of clinical medicine, Albert Einstein College of Medicine, Yeshiva University, and Morris Rubin, M.D., associate clinical professor, thoracic surgery, Albert Einstein College of Medicine, Yeshiva University, in association with George C. Leiner, M.D., lecturer in medicine, Columbia University, College of Physicians and Surgeons, and Doris J. W. Escher, M.D., lecturer in medicine, Columbia University College of Physicians and Surgeons. 968 pages, illustrated. Philadelphia: W. B. Saunders Company, 1961. $25.00.

Nursing Home Administration. By John D. Gerletti, Ed.D., educational coordinator, Attending Staff Association, professor of public administration, University of Southern California; C. C. Crawford, Ph.D., educational consultant, Attending Staff Association, emeritus professor of education, University of Southern California, and Donovan J. Perkins, M.S., business manager, Attending Staff Association. Downey, Calif.: The Attending Staff Association of the Rancho Los Amingos Hospital, Inc., 1961.



"That gallbladder has got to go. . . . This is the third Thanksgiving in a row that you've spoiled my afternoon."

NEW MEMBERS

The following physicians have been elected to membership by their respective component medical societies in the Mississippi State Medical Association and the American Medical Association:

BOBO, EDGAR EARL, Jackson. Born Philadelphia, Miss., Jan. 20, 1931; M.D., University of Mississippi School of Medicine, Jackson, 1958; interned Greenville General Hospital, S. C.; residency Huey P. Long Charity Hospital, Pineville, La.; elected Sept. 7, 1961, by Central Medical Society.

COGHLAN, ROBERT EUGENE, Aberdeen. Born Philadelphia, Miss., July 20, 1924; M.D., University of Tennessee College of Medicine, Memphis, 1956; interned University of Mississippi School of Medicine, Jackson; private, U. S. Army, one year; elected June 13, 1961, by Northeast Mississippi Medical Society.

DELANY, CLARENCE LEA, Liberty. Born Jackson, La., March 31, 1928; M.D., University of Mississippi School of Medicine, Jackson, 1959; interned Mississippi Baptist Hospital, Jackson; elected Sept. 5, 1961, by Amite-Wilkinson Counties Medical Society.

HALE, CARL RAY, Hattiesburg. Born Corinth, Miss., March 2, 1929; M.D., Vanderbilt University School of Medicine, Nashville, Tenn., 1954; interned King County Hospital, Seattle, Wash.; radiology residency, Vanderbilt University School of Medicine; member of the American Medical Association; certified by the American Board of Radiology and Nuclear Medicine; captain, U. S. Army, two years; elected Sept. 14, 1961, by South Mississippi Medical Society.

WISE, LOUIS JULIAN, JR., Jackson. Born Yazoo City, Miss., June 10, 1931; M.D., Tulane University School of Medicine, New Orleans, La., 1957; interned University of Mississippi School of Medicine, Jackson; dermatology residency, Charity Hospital, New Orleans, La.; member of the American Association for the Advancement of Science; U. S. Air Force, one year; elected Sept. 7, 1961, by Central Medical Society.

WOOD, EUGENE GREGORY, JR., Jackson. Born Moss Point, Miss., March 24, 1934; M.D., University of Mississippi School of Medicine, Jackson, 1959; interned University Medical Center, Jackson; elected March 7, 1961, by Central Medical Society.

DEATHS

DAY, HARMON ELMO, Duncan. M.D., Kentucky University Medical Department, Louisville, Ky., 1909; member of the American Medical Association; Emeritus member of MSMA and member of the Fifty Year Club; died Sept. 11, 1961, aged 76.

PERSONALS

CHARLES E. GUICE, of Hattiesburg, FRANK G. GRUICH of Biloxi, MERWIN B. MOORE JR. of Columbia, EUSTACE H. WINN JR. of Greenville, WALTER R. NEILL and JULIAN R. YOUMANS of Jackson were inducted as Fellows of the American College of Surgeons during the 47th annual Clinical Congress held in October. Among the Mississippi speakers for the congress were ORLANDO J. ANDY, CURTIS P. ARTZ, LEONARD W. FABIAN, JAMES H. HENDRIX JR., J. HARVEY JOHNSTON JR., WILLIAM A. NEELY, and WATTS R. WEBB, all of Jackson.

BOBBY JENNINGS has opened practice at the Enterprise Medical Center. A native of Lambert, Dr. Jennings is a graduate of the University of Mississippi School of Medicine. He interned at the U. S. Public Health Service Hospital in New Orleans and then spent two years in public health, stationed in Mobile. He has just been released from the Navy with the rank of lieutenant.

EMMETT D. KEMP of Magee and T. Y. FLEMING of Minter City have received Golden "T" certificates from the University of Tennessee Medical Units for their 50 years of medical service to the community. Both physicians were graduated from medical school in 1911.

FLOY JACK MOORE of Jackson was a guest speaker at the Southern Psychiatric Association convention held in New Orleans Oct. 2.

L. B. MORRIS of Macon has announced that his son, LARRY MORRIS, will be associated with him in the Morris Clinic. Dr. Morris received his medical degree from the University of Mississippi School of Medicine in 1960 and served his internship at the John Gaston Hospital in Memphis.

LESLIE V. RUSH SR. of Meridian addressed the September meeting of the American Fracture Association in Washington, D. C. He spoke on fractures of the femur.

H. LOWRY RUSH, SR., of Meridian, has departed on a two-month world trip sponsored by the International College of Surgeons. Along with 35 other surgeons and their wives, Dr. and Mrs. Rush will visit Hawaii, Japan, Hong Kong, the Philippines, Malaya, Thailand, Ceylon, India, Iran, Lebanon, Jordan, Egypt, Turkey, Greece, and Italy. In all the countries the American surgeons will conduct joint programs on new surgical techniques with local surgeons.

Professional Liability Premiums Cut 20 Per Cent For State Physicians—Policies To Be Improved

The next professional liability insurance purchased by Mississippi physicians will cost less than it has in nearly a decade while offering more inclusive protection than ever before. Both the member companies of the National Bureau of Casualty Underwriters and the St. Paul Fire and Marine Insurance Company, MSMA-sanctioned professional liability program underwriter, will reduce premium rates 20 per cent during November. NBCU member companies will revise contract provisions to broaden coverages offered physicians.

The surprise move by the insurance industry followed closely action by the House of Delegates at the 1961 annual session when the St. Paul program was adopted. The new rates reverse the upward spiral of premium increases which began in 1952.

Filings with the State Insurance Commission peg nonsurgical coverage for the basic limits of $5,000/$15,000 at a new rate of $45 annually, down from $56. For the same limits, surgical coverage drops to $108 from $134, the old rate. In the $100,000/$300,000 limit level, nonsurgical coverage is down to $92 from $115. Surgical premiums in this range decrease from $276 to $222. Similar premium cuts will apply to additional charges made for x-ray therapy, partnership coverage above individual physician's contracts, and other extras.

National Bureau companies will offer expanded coverage with elimination of certain exclusions previously included in standard form policy contracts. Among these are acts or omissions of assured physicians serving as members of professional boards or committees, a provision of insuring agreements, as well as stated exclusions relating to criminal acts and contractual aspects, "guarantees," in connection with treatment. The MSMA-St. Paul contracts contain no such exclusions.

Association officials observed that the new rate structure will offset the 1952 and the 1956 premium increases which ranged from 13 to 32 per cent for professional liability contracts. In the past five years, the State Insurance Commission has approved minor rate revisions in various categories of professional liability lines.

Insurance executives, commenting on the development, expressed the opinion that professional liability contracts purchased recently before the premium cost decrease may be cancelled on a "short table" basis and repurchased at the lower cost with some savings to the physician. The state medical association is advising physicians to consult their individual insurance agents and carrier special agents before deciding upon such action. In many instances, savings would be so small that administrative inconveniences would be unmet by reissue, it was said.

As before, professional liability premium levels are determined by computations on basic or minimum limits costs for $5,000/$15,000 coverage. Premiums for $100,000/$300,000 protection are 206 per cent of basic costs. Limits above this range are available on special application with nominal surcharges being made by some carriers. The new and lower rates are across the board, applying to all premiums with the exception of excess limits surcharges.

Present state medical association policy extends approval to the St. Paul program but does not exclude ". . . other professional liability contracts which have been demonstrated as effective and trustworthy."

Diabetes Week Set for Nov. 12-18

Diabetes Week this year has been set for Nov. 12-18 according to a release from the American Diabetes Association.

The seven-day campaign to discover undetected diabetics is the highlight of the association's Diabetes Detection Drive. The drive is conducted by ADA in cooperation with its 45 affiliate units throughout the United States and with more than

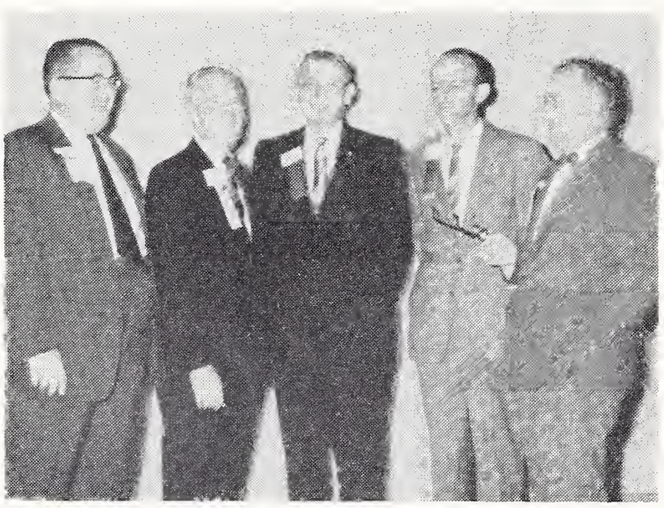
900 county and state medical societies. During Diabetes Week, detection tests are provided in hundreds of local communities.

The association estimates that one American in every 70 is a diabetic and that there are at least 2,750,000 diabetics in the country today. Of this number, about 1,500,000 know that they are diabetic and approximately 1,250,000 are unaware of their condition.

Perpetuation Is Biggest Problem, Says AAGP Head

The biggest problem facing American medicine today is not nationalization or the final defeat of this or that disease—it's perpetuation of the profession as a viril, progressive force in the community, according to the president-elect of the American Academy of General Practice.

Dr. James D. Murphy of Fort Worth, Texas, addressed the 13th Annual Scientific Assembly of the Mississippi Academy of General Practice which met in Jackson Sept. 27 and 28.



Officers of the Mississippi Academy of General Practice discuss the Sept. 27 meeting with Dr. James D. Murphy, president-elect of the American Academy of General Practice. From left to right are Dr. Frank Tatum, vice president; Dr. Murphy; Dr. Guy T. Vise, president; Dr. Tom Mitchell, past president, and Dr. John T. Howell, delegate to AAGP.

He told the state GP's about the American Academy's two-fold program: (1) to recruit high school and college students into medicine and (2) to increase the medical school graduates who have had exposure to general practice and a two-year progressive postgraduate training program which includes operative obstetrics and surgery.

Dr. Murphy explained the Academy's Project More which is designed to acquaint high school students and their parents with the rewards of a medical career. He said that individual doctors will work through high school counselors and speak before adult groups.



Speakers for the 13th MAGP scientific assembly talk with Dr. Albert L. Gore, Jackson member of the Academy. From left to right are Dr. Harry C. Shirkey, Dr. Oscar Creech, Jr., Dr. Gore, and Dr. Morton M. Ziskind.

One interesting feature of the project is a "junior preceptorship" program in which selected top students will spend time with community doctors to gain a personal insight into the medical way of life.

The AAGP leader said that the problem of having medical schools graduate undifferentiated physicians who have been properly exposed to general practice has only been scratched. "The majority of medical schools and deans pride themselves on the number of researchers and specialists they produce. . . . It is the duty of tax-supported schools to provide physicians who will render good medical care at a reasonable cost. Family doctors can fulfill this position best," Dr. Murphy stated.

He explained that the AAGP Congress of Delegates has made it mandatory that graduates from medical school after Jan. 1, 1966, complete at least two years of postgraduate training before being eligible for Academy membership.

In the business session of the two-day meeting, Dr. Guy T. Vise of Meridian was inaugurated president, and Dr. Roy Bane of Jackson was named president-elect. Other officers are Dr. Frank Tatum of Tupelo, vice president; Dr. Max L. Pharr of Jackson, secretary-treasurer; Dr. William E. Lotterhos of Jackson, delegate to AAGP,

and Dr. A. T. Tatum of Petal, alternate delegate.

New directors include Dr. F. C. Minkler of Pascagoula, Dr. Walter W. Crawford of Tylertown, Dr. John T. Bryan of Meridian, Dr. Byron A. Mayo of Drew, and Dr. Robert L. Holley Jr. of Oxford.

Speakers for the scientific session included Dr. Oscar Creech, professor of surgery and chairman of the department, Tulane University, New Orleans, La.; Dr. Morton M. Ziskind, associate professor of medicine, Tulane University, New Orleans, La.; Dr. Harry C. Shirkey, director of Children's Hospital, Birmingham, Ala.; Dr. Willis E. Brown, professor and head of the department of obstetrics and gynecology, University of Arkansas, Little Rock, Ark.; Dr. William F. Sheeley, director, Academy of Psychosomatic Medicine, Washington, D. C.; and Dr. David G. Watson, assistant professor of pediatrics, University of Mississippi School of Medicine, Jackson.

The 13th annual meeting was held in the King Edward Hotel in Jackson. Dr. Tom Mitchell of Vicksburg, president for 1961, presided.

Medicare Chief Asks Help in Service Build-up

Identification of some Medicare patients may pose difficulties to physicians and hospitals during the armed services build-up, according to a recent statement by Brigadier General W. D. Graham, Washington, executive director of the Office for Dependents' Medical Care.

"The retention of certain servicemen beyond their normal date of expiration of active duty tours is essential," General Graham told the Mississippi State Medical Association, explaining the current military expansion program.

"Implementation poses many problems," he said. "Among them is the valid identification of the extendees' dependents who will remain eligible for certain benefits while their sponsors remain on active duty."

The problem will be in reissue of the identification card, DD Form 1173. Such cards carry an expiration date coinciding with the proposed date of the service sponsor's separation from the service. Where a tour of active duty is extended under the build-up program, some dependents may possess otherwise invalid identification cards.

"It is most probable," General Graham continued, "that some dependents will be in need of authorized medical care from civilian sources prior to the time that identification cards can be up-dated. In such cases, the dependent has been instructed to explain the situation to the physician and hospital authorities.

"They have been advised to present, if available, some tangible evidence such as allotment checks, official orders, directives, or personal letters which state the pertinent facts to the physician or hospital to help support the dependent's claim of continued eligibility."

The Medicare chief stressed that the interim period when difficulties might be anticipated will warrant no broadening of "good faith" aspects of the program. He asked for patience and understanding during the next few months as the services are expanded in the face of international developments.

AMA Doctor Diplomat Program Gets Underway

Five physicians from Tulsa, Okla., members of the First Presbyterian Church of Tulsa, are giving up their practices for six-week periods to serve voluntarily at the Miraj Medical Center in Miraj, India.

Dr. C. S. Lewis, one of these five Tulsa physicians, recently reported to the AMA on the progress of the project labeled "Doctors in Asia."

The first of the group of volunteer physicians flew to Miraj in mid-August. He will return at the end of September and the next doctor will make the trip. In all, the five physicians will donate a total of 30 weeks to the program. The project is endorsed by the Tulsa County Medical Society. Funds for medical equipment, transportation, and other expenses were raised through church and public contributions.

Other groups of American physicians are also becoming interested in the possibility of initiating a similar venture in their own communities. For example, several doctors met with Dr. Lewis during his AMA visit to discuss the feasibility of adopting an overseas program which would provide medical care to another area of the world equally in need of such assistance.

Still another example of American physicians demonstrating their interest and willingness to serve in foreign mission fields on a temporary basis is shown by the large number of doctors who have written to the AMA Department of International Health in the last few months to inquire about such service. This new department administers a program approved last June by the AMA House of Delegates whereby members of AMA

may volunteer for service in the foreign mission fields on a temporary basis when emergencies arise. Cooperating with AMA in this program are missionary agencies representing every denomination sponsoring American medical missionaries.

Physicians interested in volunteering for such service are asked to write directly to the AMA Department of International Health, 535 N. Dearborn Street, Chicago 10, Ill.

Aid for State Arthritics Discussed at A & RF Meet

"I know of no other state where the climate is so ready to set up a very efficient program to aid arthritics," the medical director of the national Arthritis and Rheumatism Foundation told the Sept. 21 meeting of the state A&RF chapter.



Leaders in the state chapter, Arthritis and Rheumatism Foundation talk with guest speakers during their Sept. 21 meeting. From left to right are Mrs. Elizabeth Wates, chairman, Dr. A. Gayden Ward, chairman medical and scientific committee, Dr. Lawrence W. Long, MSMA president, and Dr. Ronald W. Lamont-Havers, medical director, national A&RF.

Speaking to a group composed of physicians, state officials, arthritics, and private citizens concerned with the arthritis problem, Dr. Ronald W. Lamont-Havers of New York City expressed his enthusiasm for the Mississippi program.

"Hope for the arthritic lies in the fact that we are providing facilities for treatment, disseminating information, and conducting research," he said. He termed the amount of misinformation "appalling" and said surveys show that only 25 per cent of arthritic patients get their information from physicians. The rest obtain theirs from newspapers, lay articles, and books on homemade cures, he said.

"Our concept of where persons get their information on health is wrong," Dr. Lamont-Havers said. "The more pseudo-scientific things are, the more they like to read them," he pointed out.

Stating that 250 million dollars are spent annually in the United States on misrepresented products, he explained that quackery always abounds when there is no rapid and certain cure for a disease. "In arthritis there is no such thing as 'a' drug. The patient must follow instructions and realize that total management is the important thing. Being human, many patients are still looking for the quick cure," he said.

Earlier in the morning session, Senator Hayden Campbell reported that legislation will be introduced in January to amend Mississippi's Indigent Care Hospital Law to include indigent arthritic patients and to provide mobile units manned by physical therapists to visit home-bound arthritics, helping them to rehabilitate themselves.

Senator Campbell said this program could be handled through an existing state agency and approximately $20,000 a biennium would be sufficient to start with. An additional appropriation of $25,000 for rehabilitating home-bound patients would be included in the introduction, he said.

Dr. Lawrence W. Long, president of the Mississippi State Medical Association, welcomed Dr. Lamont-Havers during the luncheon session, and reported that MSMA had approved the A&RF during its 93rd Annual Session in May. "We applaud your progress during your relatively short existence in our state and we look with favor upon your initial labors as you seek to consolidate the fight against this vexing metabolic disease condition," he said.

The Mississippi group has scheduled a November fund-raising campaign in all areas of the state except Jackson, where they will participate in United Givers.

State officers elected during the morning included Mrs. Elizabeth Wates, chairman; Dr. Laurence J. Clark, Vicksburg, vice-chairman; W. F. Goodman, Jackson, treasurer; Dr. Edward A. Attix, Hattiesburg, secretary; Dr. A. Gayden Ward, Jackson, chairman medical and scientific committee, and Secretary of State Heber Ladner, state campaign chairman. W. W. Fulton was named executive director and an ex-officio member of the board.

Dr. A. Gayden Ward of Jackson presided over the luncheon and Dr. Frederic C. McDuffie, also of Jackson, introduced Dr. Lamont-Havers.

UMC Neuropsychiatric Unit Now Under Construction

Newest addition to Mississippi's growing University School of Medicine is a $330,000 neuropsychiatric unit now under construction on the hospital's east wing.

Designed as a 27-bed unit, it will also provide day care and outpatient facilities with complete ancillary diagnostic and treatment services.



East view of the University Teaching Hospital shows the steel superstructure of the new neuropsychiatric unit. Designed to provide beds for some 27 inpatients as well as day care and outpatient services, the unit is being built and equipped at a cost of about $330,000.

The new division will be housed in the redesigned east wing of the hospital seventh floor and an added eighth floor. The construction and equipping of the unit is being financed by state funds in the amount of $110,000 matched by federal money on a two for one ratio.

Envisioned as an unlocked unit with two maximum security rooms, the neuropsychiatric wing will feature a home rather than a hospital atmosphere. Closed circuit television monitors plus custom-designed sound systems will permit supervision without noticeable restrictions while providing an optimum climate for in teaching.

According to plans presented by Dr. F. J. Moore, psychiatry department chairman, inpatients' rooms will be on the seventh floor while the eighth floor will comprise day rooms, occupational and recreational therapy, dining rooms, library, interview rooms, and closed circuit television equipment.

Once the unit is in operation, students will get all their psychiatric instruction at the Center, except for certain special presentations. The department will step up its resident staff as the unit moves into full swing.

Closed circuit television origination points will be installed in the ward for the disturbed and in various areas throughout the Center for distribution to the nurses' station, offices, library, lecture rooms, and clinics, making it possible for the teaching medium to benefit all students.

Complete Facts of Life Priced at $5.80

The complete facts of life may now be purchased for $5.80. Or at least that's the price set by a London record company on its just-released album "All About Sex."

Designed for parents who can't face their offspring on the subject of sex, the two long-playing 12-inch discs feature the voice of Dr. Keith Cameron, a Harley Street psychologist. The lecture takes 80 minutes and is said to answer almost all the questions of even the most persistent youngster.

Dr. Cameron says, "If there is a good relationship between children and parents, and they are not to embarrassed about sex, then, of course, the intention is that the parents could stay in the room and listen with the children. But parents who are embarrassed can simply leave—and leave the rest to me."

Side A of the first record explains the biology of sex and how babies are created. Side B discusses bad sex habits and why they're bad. The second record tackles the emotional aspects of sex—the difference between love and infatuation and why men and woman want to have babies.

U of T Professor Addresses West Medical Society

Dr. Harwell Wilson of Memphis was guest speaker for West Mississippi Medical Society's Oct. 10 meeting. Dr. Wilson, professor and chairman of the department of surgery at the University of Tennessee College of Medicine, spoke on "The Acute Abdomen."

MSMA President Dr. Lawrence W. Long also addressed the group of approximately 100 physicians and their wives. He discussed legislation, the 94th Annual Session, and congratulated the society on the appointment of one of its members,

Dr. George H. Martin, as associate editor of JOURNAL MSMA.

During the business session, the society considered the possibility of Association sponsored legislation authorizing medical practice corporations for purposes of providing tax shelters in establishing voluntary retirement plans for physicians.

The scientific session and business meeting was followed by a buffet dinner.

Dr. H. Thurston Whitaker, president, presided over the meeting, and Dr. Tom H. Mitchell presented the business items. Dr. W. H. Parsons introduced the guest speaker. The meeting was held at the Country Club of Vicksburg.

State Blindness Prevention Holds Organizational Meeting

The Mississippi Chapter of the National Society for the Prevention of Blindness held its organizational meeting in September. The state group was



Dr. A. L. Gray, state health officer, and Dr. Helen Bernfield, leaders in the Mississippi Society for the Prevention of Blindness, confer on organizational plans for the group. The state society held its first meeting Sept. 7.

initiated by the Capitol Business and Professional Women's Club.

W. P. Wooley was named chairman of the Mississippi chapter. Mrs. Ruth Armstrong is president of the Capitol B & PW group and Dr. Helen Bernfield is chairman of special projects.

During the meeting, leaders in the health and welfare field told approximately 70 community and civic leaders the need for such an organization. Miss Elizabeth Marvin, field representative of the National Society for the Prevention of Blindness, outlined the activities of a state society. The program is geared toward prevention through a broad educational campaign, she said. She explained that the National Society has been carrying on its program on a localized basis only since 1950. At this time, 32 states have organized chapters.

Dr. Fike Addresses North Central Society

Dr. Earl Fyke of Jackson spoke on "Conditions of the Heart" at the Sept. 20 meeting of the North Central Mississippi Medical Society.

Dr. Gaines Cooke of Grenada showed a film on closed chest cardiac massage.

Dr. Edward Pennington of Ackerman, president, presided over the meeting which was held at the Montfort Jones Memorial Hospital. Dr. R. B. Townes Jr. of Grenada is secretary of the group.

AMA, Uncle Sam Declare War on Medical Quackery

The American Medical Association and the federal government have declared all-out war on medical quacks and charlatans who bilk the sick and gullible of hundreds of millions of dollars each year through useless gadgets, phony nostrums, fake reducing pills and the many other gimmicks of the medicine show trade.

The campaign was launched at the First National Congress on Medical Quackery, under joint sponsorship of the AMA and the U. S. Food and Drug Administration, Oct. 6-7 at the Sheraton-Park Hotel in Washington.

Among the keynote speakers were two top officials in President John Kennedy's cabinet: Secretary of Health, Education and Welfare Abraham A. Ribicoff and Postmaster General J. Edward Day. Dr. Leonard W. Larson, president of AMA, and Oliver Field, director of the AMA department of investigation, spoke for organized medicine.

Others on the program included Herbert J. Miller, assistant U. S. attorney general in charge of the criminal division; George P. Larrick, commissioner of the FDA, and Paul Rand Dixon, chairman of the Federal Trade Commission.

Other speakers included representatives of the American Cancer Society, the Arthritis and Rheumatism Foundation, and the National Better Business Bureau.

C. Joseph Stetler, director of the Legal and Socioeconomic Division of AMA presided at the meeting.

Many state and county medical societies from throughout the nation sent representatives to the Congress. They carried back to their societies plans for cooperation with enforcement agencies at the local level and for a step-up of public education on the subject in an accelerated campaign against quacks.

Highlights of the talks included:

—Larson: "We must educate the public thoroughly and effectively. We must wage psychological as well as scientific warfare. We must not only prove the worthlessness of quackery, but we also must establish confidence in sound medical and health care.

"Speaking for the American Medical Association and our 180,000 physician-members, I pledge our efforts to the final eradication of quackery and all its minions and satraps."

—Ribicoff: "The total cost of unnecessary or dangerous medications in this country probably exceeds $1 billion each year. Much of this expense is to men, women, and children who dearly need this money for good medical care or for other necessities of life.



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"It's a surprise for my husband—wrap it as a gift."

"But quackery's costs in dollars only introduces the story. In terms of false hopes raised, in terms of ugly delusions fostered, in terms of tinkering with human life itself, the cost cannot be measured. The quack flirts with disaster. He challenges the sixth Commandment: 'Thou shalt not kill.'"

—Larrick: "The most widespread and expensive type of quackery in the United States today is in the promotion of vitamin products, special dietary foods, and food supplements. Millions of consumers are being misled concerning their need for such products. Complicating this problem is a vast and growing 'folk-lore' or 'mythology' of nutrition which is being built up by pseudoscientific literature in books, pamphlets, and periodicals. As a result, millions of people are attempting self-medication for imaginary and real illnesses with a multitude of more or less irrational food items. Food quackery today can only be compared to the patent medicine craze which reached its height in the last century. Especially disturbing is the tendency shown by some big and hitherto respected food concerns to use quackery in their sales material."

—Dixon: "Properly drafted and administered, legislation giving the Federal Trade Commission power to issue temporary cease-and-desist orders would, while observing all the requirements of due process, make it possible to protect the public interest more adequately in many areas.

"Although in the case of food, drug, and cosmetic advertising, the Commission can . . . apply to district courts for temporary injunctions, it would be much more efficient for the Commission itself to issue temporary orders in those cases as well as in others."

—Day: "The peddling of fake medical cures is the most prominent fraudulent activity conducted through the U. S. mails today. This huge 'industry'—and it has grown to that extent—is so prevalent and so widespread that it taxes the manpower of the Postal Inspection Service to the utmost in trying to bring the perpetrators to justice.

"We are doing everything we can to make more of our inspectors available to work on cases of this nature, to the extent it will not jeopardize enforcement in other fields."

—Dr. L. Henry Garland, American Cancer Society: "The charlatan is in business to make money and he does so by offering hope. He tends to be courteous, optimistic, easily understood by the laymen, and confident that cure can be obtained. His patient does not care that the method used is a secret one, that the testimonials are largely fraudulent, or that the 'doctor' may not even be licensed. All he knows is that he is being

Other officers named during the day-long conclave in Jackson were Thomas Puckett, Hattiesburg, vice president; Mrs. Leland Speed, Jackson, woman vice president; Dr. A. E. Brown, Columbus, chairman of the board; Joe Carson, Meridian, secretary; George Wallace, Jackson, treasurer; Dr. Ralph Noonkester, Hattiesburg, Mrs. Clare Hornsby, Biloxi, and Mrs. F. E. Gilliland, Clarksdale, executive committee members.

Three outstanding volunteer workers were recognized during the meeting for their contribution to cancer control. Dr. Bratley was presented the National Divisional Award for long-time service, Mrs. Gilliland received the Mississippi Division award for service, and Robert D. Morrow, Brandon, was cited for leadership in fund raising and education as 1961 crusade chairman.

Emphasis during the afternoon was on the theme "Youth Looks at Cancer." With James H. "Farmer Jim" Neal moderating, teen-agers discussed various phases of the cancer fight, including smoking, quackery, research, and fund-raising.

Fred H. Block, member of the National Board of Directors and past president and crusade chairman of the Louisiana Division, was the luncheon speaker.

Panels on crusade, education, organization, and service completed the afternoon schedule.

Delta Names Dr. Mounger President-elect at Oct. 11 Meet

Dr. S. G. Mounger of Greenwood was named president-elect and Dr. R. F. Spaulding of Arcola inaugurated president of Delta Medical Society during the organization's Oct. 11 meeting in Greenville.

Dr. Howard Nelson of Greenwood was reelected secretary-treasurer. Dr. John S. Barr is immediate past-president.

Guest speaker for the 76th Semi-annual Meeting was Dr. Frank Tullis of Memphis. Dr. Tullis, chairman of the department of medicine of the University of Tennessee College of Medicine, spoke on "Management of Cardiac Arrhythmias."

Other speakers and their subjects were Dr. Phil O. Nelson, Cleveland, "Epilepsy and Its Bizarre Forms"; Dr. Lucien R. Hodges, Jackson, "Neurological Diagnostic Procedures"; Dr. S. G. Mounger, Greenwood, "Temporal Arteritis Syndrome"; Dr. Guy H. Robinson, Indianola, "Survey of Intraoccular Pressure of Personnel in Local Manufacturing Plant"; Dr. W. S. Witte, Leland, "The Physician and His Relationship in Sports Medicine."

Dr. Barr, president, presided over the meeting. Dr. John G. Archer of Greenville gave the address of welcome and Dr. O. E. Ringold of Cleveland gave the response.

Following the scientific and business sessions a dinner was held at the Country Club. Dr. Robert Q. Marston, dean and director, University of Mississippi School of Medicine, was the dinner speaker.

MHA Council Distributes Medical Staff Questionnaire

A medical staff questionnaire on hospital services has been distributed by the Council on Professional Practice of the Mississippi Hospital Association for use by member institutions.

In recommending the survey form, Dr. W. L. Jaquith, council chairman, writes, "In keeping with good management practices, periodic evaluation of services provided is a strong administrative tool."

The form, which was originally prepared by Sister Margaret Vincent, administrator, St. Vincent Infirmary, Little Rock, Ark., consists of 21 questions. The majority of the queries may be answered "yes" or "no" or by giving a rating from "excellent" to "poor." Four require essay-type answers.

AMA Meet to Study Heredity and Disease

A study of heredity as it relates to human ills will be presented as a feature of the 15th annual clinical meeting of the American Medical Association Nov. 26-30 at Denver.

Geneticists are rapidly advancing fundamental knowledge in this highly important medical field. This new knowledge will be passed on to clinicians for their guidance in practice.

"Genes, Chromosomes and Human Disease" will be the general subject of the section, under chairmanship of Dr. Leroy J. Sides, of Denver.

Theodore T. Puck, Ph.D., head of the department of biophysics at the University of Colorado, will relate some of his new research findings in a paper entitled "The Gene and the Protein Molecule."

Other topics will include "Genes and Chromosomes," by David M. Bonner, Ph.D., University of California biologist; "Hereditary Aspects of Disease," by Dr. Walter Burdette, Salt Lake City;

"Hemoglobinopathies," by Dr. Max Wintrobe, Salt Lake City.

Dr. John H. Talbott, of Chicago, editor of the *Journal of the American Medical Association,* will deliver a paper on "Gout" as a part of this section.

Much has been learned by the specialists in space medicine that will be of value to the practicing physician in treating patients who seldom get off the ground. This knowledge also will be presented in a section in space medicine at the meeting.

"The Impact of Space Medicine Research on General Medicine" will be presented by Dr. Hubertus Strughold, advisor for research to the commander, Aerospace Medical Center, Brooks Air Force Base, Texas.

Other space medicine topics will include "The NASA Program in Life Sciences," by Brigadier General Charles H. Roadman, deputy director of the life sciences division of the National Aeronautics and Space Administration, Washington; "The Air Force Program in Aerospace Medicine," by Major General Oliver K. Niess, surgeon general of the U. S. Air Force, Washington, and "Space Radiations: Their Physical Characteristics and Biological Implications," by Colonel Gerrit L. Hekhuis, chief of radiobiology, School of Aerospace Medicine, Brooks Air Force Base.

An interesting series of papers will be presented at special breakfast programs Nov. 28-29. Topics for the Nov. 28 breakfast session will be "The Malmstrom Vacuum Extractor in Obstetrics"; "A Pyelogram Clinic," and "The Operation of a Poison Control Center." On Nov. 29 topics will be "Community Care of Psychiatric Patients vs. Prolonged Institutional Care"; "Dermatology Quiz Session," and "Unusual Diagnostic Problems in Pulmonary Surgery."

A series of color television programs during the meeting will include such subjects as "The Art of Psychiatric Interviewing," "Resuscitation of the Newborn," "Total Abdominal Hysterectomy," "Primary Dermatologic Disorders" and "Dermatologic Manifestations of Systemic Disease."

Also scheduled is an outstanding program of medical motion pictures to be screened daily during the sessions.

Gulf Coast Clinical Society Meets in 21st Session

The 21st annual meeting of the Gulf Coast Clinical Society was held Oct. 14 in Pensacola, Fla.

A group of five physicians conducted the clinical lectures at the scientific sessions. They were Dr. Henry F. Page, associate physician of the Lankenau Hospital, Philadelphia, Pa.; Dr. Roy T. Parker, associate professor of obstetrics and gynecology, Duke University School of Medicine, Durham, N. C.; Dr. Edward B. D. Neuhauser, radiologist-in-chief, the Children's Hospital Medical Center, Boston, Mass.; Dr. W. Emory Burnett, professor of surgery, Temple University School of Medicine, Philadelphia, Pa., and Dr. C. P. Phoebus, commanding officer, U. S. Naval School of Aviation Medicine, Pensacola, Fla.

Dr. C. D. Taylor, Jr., of Pass Christian, was MSMA's representative at the meeting.

Schering Releases Medifilm Report III

Medifilm Report III, presenting highlights of the American Medical Association's 110th Annual Meeting in New York City, has been made available to medical and allied groups by Schering Corporation in cooperation with the AMA Department of Medical Motion Pictures and Television.

The 33-minute, 16 mm. black and white sound film features scientific exhibits, lectures and panel discussions. Host-narrator is Dr. Jeff J. Coletti, of Old Westbury, N. Y. Interested state and county medical societies may obtain a copy of Medifilm Report III by writing to the American Medical Association, 535 North Dearborn St., Chicago 10, Ill., or to the Audio-Visual Department, Schering Corporation, Union, N. J.

Of special interest is a demonstration of external cardiac massage at the 1961 Gold Medal Award exhibit manned by Guy Knickerbocker and W. B. Kouwenhoven, both of Baltimore. A mannikin is used to show the actual technique of closed chest cardiac massage.

Other subjects covered are office management of varicose veins (Dr. William Foley, New York, N. Y.); electrical anesthesia (Dr. James H. Hardy, Jackson, Miss.); new concepts in diabetes (Dr. Howard Root, Boston, Mass.); rubella in pregnancy (Dr. Frank Lock, Winston-Salem, N. C.); polycystic ovaries (Dr. Robert Greenblatt, Augusta, Ga.); the anxious out-patient (Dr. Jackson Smith, Chicago, Ill.); allergic reactions to drugs (Dr. Giles A. Koelsche, Minneapolis, Minn., and panel members); cine coronary arteriography (Dr. F. Mason Sones Jr., Cleveland, Ohio); and part time medical mission work (Dr. Archibald Fletcher, India and Glendale, Calif.).

In conclusion, Dr. E. Vincent Askey, outgoing AMA president, speaks on the theme of the 1961 convention—teamwork in medicine.

State Morbidity Reported Through September 22

The Mississippi State Board of Health reports the following occurrence of morbidity for 1961 through the 38th week of the year, ending September 22. Case totals reported are shown opposite the disease condition.

Tuberculosis, pul.	507
Tuberculosis, O. F.	35
Gas gangrene	2
Salmonella infections	8
Brucellosis	7
Dysentery	
Amebic	27
Bacillary	30
Septicemia, NOS	1
Staphylococcus infection	13
Leptospirosis	2
Diphtheria	5
Typhoid fever	2
Meningococcus infection	
Meningitis	10
Meningococcemia	4
Meningitis, O. F.	91
Tularemia	9
Tetanus	9
Poliomyelitis (P)	17
Encephalitis	
Infectious	45
Postvaccinal	1
Mononucleosis, infectious	79
Generalized vaccinia	1
Toxoplasmosis	3
Puerperal sepsis	2
Diarrhea of newborn	13
Hepatitis, infectious	1132
Hepatitis, serum	2
Helminthic infections	
Hookworm	1156
Ascariasis	274
Strongyloides	36
Cryptococcosis	1
Histoplasmosis	25
Streptococcus infection	
Scarlet fever	183
Strep throat	1512
Rheumatic fever	3
Rheumatic heart	3
Pertussis	36
Measles	1278
Chickenpox	764
Mumps	617
Influenza	719
Chancroid	16
Gonorrhea	4570
Syphilis	
Early	204
Late	224

Repair of Prisoners' Medical Defects Proves Successful

The removal of scars, tattoos, cataracts, and the uncrossing of eyes are all key parts of the Oregon Correctional Institution's rehabilitation program. Superintendent Paul J. Squier judges the two-year effort a big success.

The institution, for first offenders only, opened in May, 1959. Its green buildings are located five miles southeast of Salem, the capital city of Oregon, and the institution prefers to accept prisoners 26 years old and under.

Many of the 268 inmates are teen-agers and when sentenced some bear the tattoos of their "gang" on their hands.

These tattoos bother them the most, Squier said. "To the smarter ones, it's no longer the mark of a tough guy. They're glad to be rid of them."

At least 125 tattoos have been taken off, and several deforming scars removed.

Another important phase of the program is the uncrossing of eyes and the removal of cataracts. There have been four such operations—all successful.

"One man's eyes were crossed so badly he wouldn't look you in the eye," Squier said. "After the operation, he looked you square in the eye and was proud as a peacock. There was a tremendous improvement psychologically."

Some of the men said that because of their impairments "even their mothers didn't want them around." The correction of the defects made "new men" out of them.

The eye operations, removal of the tattoos, and plastic surgery on the scars are free, but an inmate must request it. Two Portland, Ore., doctors perform the work, donating their professional skills.

Immediately after an operation the institution notifies proper law enforcement agencies of the alteration in the man's description.

The institution program is fairly unique, Squier said, but it is an approved part of rehabilitation —"as important as any other phase."

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ORIGINAL PAPERS

Radiologic Aspects of Duodenal Ulcer

ROBERT D. SLOAN, M.D., and LOUIS S. CHATHAM, M.D.
Jackson, Mississippi

Peptic ulcer disease of the duodenal bulb is a common entity, with a standard GI series being the most satisfactory method of documenting the process. Some of the practical aspects of the radiologic evaluation of the duodenal bulb are discussed, along with appropriate illustrations.

PEPTIC ULCER DISEASE of the duodenal bulb accounts for a significant percentage of the organic pathology involving the upper portion of the intestinal tract. A clinical diagnosis of ulcer is both frequent and casual, and it is apparent that the label is often applied rather indiscriminately to a variety of complaints referable to the abdomen. Since the diagnosis of peptic ulcer carries with it certain stigmata, both from the medical and socioeconomic standpoints, it is the physician's obligation to confirm his clinical diagnosis with objective documentation whenever possible. The most practical method of securing such documentation is by means of an adequately performed gastrointestinal series. It is proposed at this time to discuss some of the radiologic aspects of peptic ulcer disease of the duodenal bulb.

EXAMINATION PREPARATION

For an adequate radiologic evaluation of the duodenal bulb it is essential that the stomach be empty of food and fluid at the time of the examination, and in the average case, fasting for a period of eight to 12 hours accomplishes this purpose. Residual barium in the colon may obscure the duodenum, and in such instances laxatives or enemas are indicated.

From the Department of Radiology, University of Mississippi School of Medicine.

It is not proposed to enter into details regarding the actual performance of an upper gastrointestinal series. Suffice it to say that for an adequate study the duodenal bulb must be evaluated routinely by a combination of fluoroscopy, spot films and conventional radiographs.[1] Fluoroscopy should be performed with the patient in the recumbent and erect positions, and in varying degrees of rotation. Spot films obtained during fluoroscopy, with and without pressure, are particularly valuable in that they permit one to selectively record an image of the bulb in various positions and phases of distention. Both spot films and routine radiographs constitute a permanent record of the status of the bulb. Radiographs must be obtained with the patient in various positions, because the bulb, a three dimensional structure, is usually visualized in only two dimensions on any given radiograph. In recent years image amplification and cine

equipment have further increased our ability to visualize and record the patterns of the duodenal bulb.

NORMAL BULB APPEARANCE

A knowledge of the radiologic appearance of the normal duodenal bulb is essential before one can evaluate possible pathological changes involving this structure. It should be pointed out that what one actually visualizes, either at fluoroscopy or on radiographs, is a tubular lumen filled with varying amounts of a barium-containing

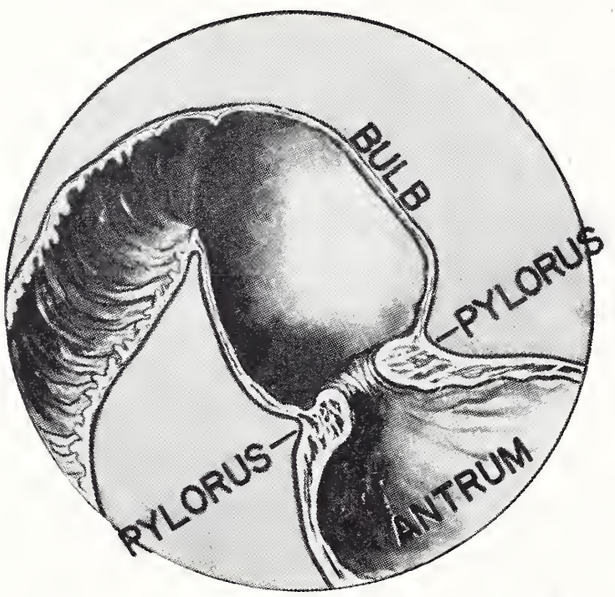


Figure 1. A schematic cross section of the normal distal antrum, pylorus, and duodenal bulb in a fully distended state is shown.

medium. Changes in the wall of the duodenum are reflected by changes in the luminal pattern, but under usual conditions the wall itself is not visualized (Fig. 1).

The position and contour of the duodenal bulb vary from individual to individual, being influenced by body build and other anatomical variables. More important, however, is the intraindividual variation in contour of the lumen related chiefly to the physiological activity of the bulb. One might in a crude sense compare the duodenal bulb to one of the heart chambers, with its alternate filling and emptying, although in the case of the duodenum the rate of motor activity is much slower and its rhythmic pattern subject to many more variables. Nevertheless, the bulb does distend and contract, with its luminal pattern at any given instant being dependent upon the degree of filling.

The fully distended duodenal bulb, as visualized radiologically, is essentially triangular in shape with its base at the pylorus. Its borders are usually smooth without gross mocosal folds, and it is this pattern that one usually associates with a so-called "normal bulb"[2] (Fig. 2). Intermediate



Figure 2. This illustrates the radiographic appearance of the same area as in Figure 1 as shown on a gastrointestinal series. It should be emphasized that what is actually visualized is a barium-containing medium filling the lumen.

stages of filling are often difficult to interpret as the contour of the lumen shows considerable variation in shape and the mucosal folds show various degrees of prominence (Fig. 3 and 4). In the contracted bulb one may visualize only a few streaks



Figure 3. A normal bulb in only a moderate state of distention.

of barium trapped between mucosal folds. If one happens to take a radiograph at the time the bulb is actively contracting, the entire contour may be blurred by motion.

PATTERNS IN ULCER DISEASE

The radiologically demonstrable changes in the duodenal bulb with peptic ulcer disease can be related both to the ulcer crater and to the inflammatory or fibrotic changes in the adjacent tissues.

To be identified radiologically, a crater must be filled with barium, and it is probable that the pocket of the crater must be at least 2 to 3 mm. in width and depth before it will be shown with any frequency. Its position in relation to the duodenal borders will determine to some extent its radiologic appearance. Craters arising from the superior or inferior borders will be viewed in profile as sharply defined collections of barium projecting outside the confines of the adjacent lumen (Fig. 7 and 8). When arising from the



Figure 4. A normal bulb in the contracted state. If the appearances shown in Figures 3 and 4 were viewed alone, it would be impossible to be sure that the bulb was normal.

posterior wall of the bulb one may visualize the crater as a rounded area of increased density projected through the barium column in the bulb lumen (Fig. 5 and 6).

In a properly performed study craters are relatively easy to demonstrate in a bulb that has not been severely scarred by previous ulcers, but in a badly deformed bulb they may be most difficult to identify. A crater may also be obscured by blood clots or debris, or by marked edema and coarsening of the mucosal folds elsewhere in the bulb. One must also be on guard not to interpret the so-called pseudodiverticula developing in scarred bulbs as being actual craters (Fig. 9).

In an acute ulcer there is frequently a ring of edematous tissue surrounding the crater, and this



Figure 5. Craters projecting from the posterior surface of essentially nondeformed bulbs are illustrated in this figure and in Figure 6.

is visualized as a halo of relative radiolucency surrounding the denser pocket of barium within the crater (Fig. 5 and 6). Irritability and spasm of the duodenal bulb musculature may also ac-

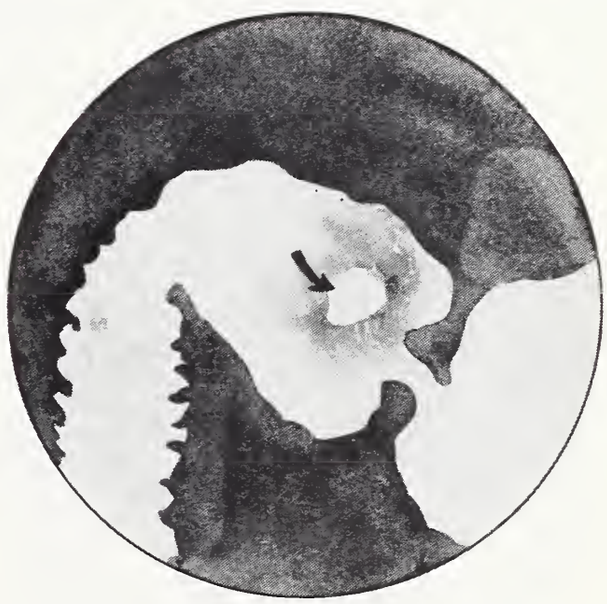


Figure 6. Craters arising from the posterior wall of the bulb appear as rounded areas of increased density projected through the barium column in the bulb lumen. There is often a surrounding halo of edematous tissue as is well shown in this illustration. The lack of deformity of the overall bulb structure would suggest that these represent relatively acute ulcers.

company the acute ulcer. As healing progresses, one frequently visualizes coarsened mucosal folds radiating in toward the crater site.[3] The fibrosis and scarring associated with repeated or prolonged episodes of ulcer activity usually result in the formation of the classical so-called "clover leaf" deformity (Fig. 9). The more normal areas of the bulb between the bands of scar tissue form the pseudodiverticular outpouchings.



Figure 7. This represents a small crater projecting from the superior border of the bulb, with some minor overall deformity of the bulb.

An acute ulcer may heal without leaving any obvious radiologic residual, but prolonged or repeated episodes of activity inevitably produce enough scarring to permanently deform the contour of the bulb.



Figure 8. In this view the entire bulb is grossly deformed, with the arrow indicating the base of a large crater projecting from the superior border.

So far, changes have been described which permit an unequivocal radiologic diagnosis of peptic ulcer disease. There are, however, other patterns which are subject to more variable interpretation. One may occasionally demonstrate a bulb that is unusually irritable and spastic, with or without coarse mucosal folds, but in which there is no actual deformity of the contour or demonstrable crater. Such bulbs may be viewed with suspicion, but from the authors' standpoint they do not in themselves warrant a radiologic label of peptic ulcer disease.

ACCURACY OF EVALUATION

It was stated initially that the most practical method of documenting the presence of peptic ulcer disease of the duodenal bulb was by means of an adequately performed upper gastrointestinal series. As with any diagnostic technique there is a certain incidence of false positive and false negative interpretations, and it is reasonable to assume that the number of these errors will be in part related to the experience of the examiner and the overall technical adequacy of the radiographs. It has been claimed that the radiologic method of diagnosis of peptic ulcer is 95 per cent accurate, although it is obviously difficult to quantitate statistically such a statement.[4]



Figure 9. The classical so-called "cover leaf" deformity, secondary to the extensive scarring associated with prolonged ulcer activity, is shown. The outpouchings between the areas of scarring represent pseudodiverticula, and should not be confused with an actual crater.

There is one situation which requires special comment, and that relates to the emergency gastrointestinal series performed on the patient with gross hematemesis or melena. In such situations the demonstration of peptic ulcer changes in the duodenal bulb may be of real help, but a negative study is of less diagnostic value. This is especially true if the patient's condition is such that a truly adequate examination is precluded. In the presence of varying degrees of shock, active vomiting, or excessive amounts of blood or secretions in the stomach, a thorough and satisfactory examination may simply be out of the question. It should also be apparent that a considerable degree of patient cooperation is required in the performance of a satisfactory study.



Figure 10. A less advanced degree of deformity is illustrated here.

While adequate radiologic studies are reasonably accurate in demonstrating peptic ulcer disease of the duodenal bulb, they are not as satisfactory for the evaluation of the activity of the process. The demonstration of a crater, regardless of symptomatology or other clinical findings, is unequivocal evidence of activity of the disease. But for every case in which a crater is shown there are probably 10 to 15 studies in which the only radiologic finding is the presence of a deformed bulb. In some of these examinations there may be secondary signs suggesting activity, such as edema of the mucosal folds (Fig. 12) along with the fluoroscopic observation of irritability and tenderness of the bulb region. On many occasions, however, one can from the radiologic study state only that the duodenal bulb has been the site of peptic ulcer disease, and in these instances heavy reliance must be placed upon the symptomatology and other clinical evidence of quiescence or activity of the process.

SUMMARY

A standard gastrointestinal series continues to be the most satisfactory means of evaluating the presence or absence of peptic ulcer disease of the



Figure 11. A markedly deformed bulb is shown. In such marked scarring, the pylorus may be difficult to identify, and further activity of the peptic ulcer disease could well lead to obstruction. The patterns in Figures 9, 10, and 11 indicate that the bulb has been the site of extensive peptic ulcer activity, but there is nothing in the appearance to clearly indicate the state of activity of the process at the time the examination was performed.



Figure 12. Here the bulb is grossly deformed without an obvious crater, but in addition it contains large edematous mucosal folds. Such folds are one of the secondary signs suggesting activity of the process.

duodenal bulb. The adequacy of such studies can be related to the training and ability of the examiner, the quality of the radiologic equipment available, and the general condition of the patient.

Some of the patterns of the duodenal bulb in the normal and diseased state are discussed, and selected illustrations presented. ★★★

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3. Shanks, S. C., and Henley, P.: A Textbook of X-Ray Diagnosis, Philadelphia, W. B. Saunders Company, 1952, vol. 3, p. 189.
4. Wilbur, D. L., and Watts, M. S. M.: Peptic Ulcer: Modern Criteria for Diagnosis and Attempted Diagnosis of Healing, Radiology 52:800-809, 1949.

TEMPEST IN A MILKPAIL

The U. S. dairy industry whipped up a slight froth over a news bulletin from Britain about a farmer whose cows gave more milk while watching TV than while standing "sullenly in barnish gloom." The industry's Washington representatives churned up this retort:

In jolly old England far over the sea,
A cow's more productive while watching TV.
To us over here, there seems to arise
A question of whether it's actually wise
To let cows watch programs of murderous ilk.
If they curdle the blood, won't they curdle the milk?

—*Insider's Newsletter*

Death by Choice?

FLOY JACK MOORE, M.D., THOMAS PURSER JR., M.D., and THOMASINA BLISSARD, M.A.

Jackson, Mississippi

FOR A VERY GOOD REASON the title above is followed by a question mark. The cause of death referred to is suicide, which on the surface may appear to result from a person's deliberate choosing of death. Because the individual who makes this choice is frequently ill, or thinks himself to be ill, often he has visited a physician's office in the months prior to that choice of death rather than life. The physician, then, may have an opportunity to influence that decision—and by his influence reduce the number of suicides in this state and nation.

STATE SUICIDES

Suicide ranked as the 11th highest cause of death in the United States in 1959, when it was responsible for over 18,000 deaths.[5] That Mississippians contributed to the annual total is evidenced by the following excerpts of news stories taken from Mississippi newspapers:

JEWELER KILLS SELF
IN M-------, MISS.

B. H., 51-year-old jeweler, took his own life by firing a .22 caliber pistol bullet into his temple, according to the ruling of a coroner's jury here. No motive for the suicide was given.

V------, MISS. MAN SUICIDES:
BLASTS SHOT THROUGH HEAD

An automobile tire recapping shop owner lay down on his bed at 4 a.m. Wednesday and blasted a hole through his head, killing himself almost instantly, relatives said. . . . He was about 51-years-old. . . . They said Mrs. H. (his sister) heard him walk into the house shortly before 4 a.m. and heard the pistol blast a few minutes later. . . . The bullet traveled through his head, two pillows, and lodged in the floor, witnesses said.

From the Department of Psychiatry, University of Mississippi School of Medicine.

An awareness of suicide as a medical problem is necessary if any sort of preventive measures are to be effected. Though it is extremely difficult to prevent the suicide of a person determined to take his own life, the physician has better opportunities than anyone else to recognize the potentially suicidal individual. Treatment that the physician can give and precautions that he can advise the family to take may very well see the patient through crucial periods and avert completed suicide.

STATE MAN KILLS
SELF IN GUN BLAST

A 57-year-old C----, Miss., man killed himself Wednesday afternoon with a shotgun. . . . Officers blamed the suicide on prolonged ill health.

ONE OF LOWEST RATES

Mississippi, fortunately, has one of the lowest suicide rates in the nation. The rate in this state for 1959 was 5.8,[1] compared with the national level of 10.6 per 100,000. This statistical picture does not, however, altogether accurately depict the problem, since among white males 35 to 44 years old in Mississippi, suicide was the fourth highest cause of death in 1959.[2] An example for this age and sex group is cited below:

DEATH OF --------, MISS. GROCER
'SUICIDE': BLAMES ILL HEALTH

An inquest jury ruled the death of 41-year-old grocer due to a self-inflicted bullet wound. . . . City marshall ----- said the grocer locked himself in the bathroom before shooting himself. Friends said B-- had been despondent over ill health.

Further, in Mississippi as in the entire nation, white males of all ages are the group most likely

to commit suicide.[6] Of 130 suicides in this state in 1959, 85 were among white males. Of the remaining, 25 were white females, 16 were Negro males, and 4 were Negro females.

MURDER AND SUICIDE

In addition to destruction of self, the suicidal patient not uncommonly visits his hostility and deranged thinking on other people, e.g., as below:

MURDER-SUICIDE VICTIMS BURIED NEAR C----, MISS.

Double funeral services for Mr. and Mrs. E. T., natives of M---- County, and victims of a murder-suicide, were held at ----- Church at 2 p.m. today. T., 43-year-old aluminum worker, killed his wife and critically shot his only daughter, 20-year-old B---, and fatally wounded himself in N--- O---- Tuesday. No motive has been uncovered for the murder and suicide.

THE YOUNG VICTIMS

It is especially noteworthy that children, too, commit suicide.

H-----, MISS. BOY, AGED 11, FOUND HANGED

J, K., 11, laughed with his parents at breakfast this morning and his mother left him mowing the yard while she went on an errand. A few minutes later, his small brother found him hanging from a dog chain with a dog collar around his neck, his feet barely suspended from the floor of a shed behind his home, police said. The youngster was the second to die by hanging in the state in three days.

The above instances of completed suicide bring to mind attempted suicide among children as reported by Dr. James M. Toolan of New York University School of Medicine.[3] He reported that "Nearly 20 per cent of youngsters admitted to New York's Bellevue Hospital after suicide attempts in 1960 were below age 12. . . ." Dr. Toolan also points out that "suicide is especially common among university students, ranking second only to accidents as a cause of death in this group."

The significance of the problem is further highlighted by a comparison of the suicide rate with that of other causes already recognized as worthy of a vast amount of attention in the research laboratory and in the practicing physician's office.

U. S.—1959[5]	*No.*	*Rate (Per 100,000)*
Suicide	18,630	10.6
Homicide	8,145	4.6
Nephritis and Nephrosis	14,120	8.0
Leukemia and Aleukemia	12,270	7.0
Chronic rheu. ht. dis.	17,495	9.9
Cirrhosis of the liver	19,242	10.9
Mississippi—1959[1]		
Suicide	130	5.8
Homicide	231	10.4
Nephritis and Nephrosis	290	13.0
Dis. of blood and blood forming organs	58	2.6
Chronic rheu. ht. dis.	127	5.7
Cirrhosis of liver	100	4.5

The above information, essentially a brief accumulation of previously published facts, is printed as a possible aid to practicing physicians, all of whom doubtless at some time in their practice will be confronted with suicidal patients. An awareness of suicide as a medical problem is necessary if any sort of preventive measures are to be effected. Though it is extremely difficult to prevent the suicide of a person determined to take his own life, the physician has better opportunities than anyone else to recognize the potentially suicidal individual. Treatment that the physician can give and precautions that he can advise the family to take may very well see the patient through crucial periods and avert completed suicide.

SERIOUSNESS OF THREATS

In the early stages of a study of suicide specifically in Mississippi, one notable fact emerges which should prove helpful to the physician in his efforts to treat the suicidal patient. That fact is that most people who commit suicide give some indication of their intention—and that suicidal threats, attempts, or gestures must always be taken seriously. Of 10 patients who had been hospitalized in Mississippi for neuropsychiatric disorders and who subsequently committed suicide, eight were known to have threatened or actually attempted suicide, some more than once, prior to the actual taking of their lives. (It is noteworthy that a large number of people who commit suicide have never been seen by a psychiatrist.) This proportion of neuropsychiatric patients who indicated suicidal intentions substantiates the investigations of Shneidman and Farberow of the Los Angeles Suicide Prevention Center and of the Veterans Administration's Central Research Unit for the

Study of Unpredicted Behavior—their studies of people who had committed suicide showing that approximately 75 per cent[4] had threatened and/or attempted suicide previously. In other words, the patient who succeeds in taking his life gives a warning more often than not. The physician must be cognizant of this warning and the patient's family must be made to understand that in many instances the threat, gesture, or attempt is, as Shneidman and Farberow have said, "a cry for help." The physician should treat as a medical emergency any patient who threatens or attempts suicide, who shows prolonged or undiminishing grief after misfortune, who demonstrates or expresses depression and/or pessimism, or who is consumed with self-depreciation. Though these manifestations of depression do not represent the only early signs of suicidal tendencies, many of the patients who can be treated and prevented from taking their lives have one or more of these symptoms.

RECENT INFORMATION

Still other helpful information for the practicing physician has come from studies made in other sections of the country. That information is essentially a refutation of what were thought to be the facts concerning suicide. The most recent studies indicate that:[6]

1. Persons who commit suicide frequently give a warning (in about 75 per cent of the cases) through a suicidal gesture or threat. People who threaten suicide may very well actually commit suicide.

2. Although many individuals who attempt suicide show marked improvement following the crisis, there appears to be a 90-day period during which they may attempt suicide again. One study showed that "almost half of the individuals who were in a suicidal crisis and subsequently committed suicide, did so within 90 days of having passed the emotional crisis and after they had seemed to be on the way to recovery."

3. Though most people who commit suicide have conflicts and ambivalent feelings or may be severely neurotic, the majority are not usually "insane."

4. Depression, per se, does not invariably accompany suicide. The predominant manifestations may be those of anxiety, agitation, guilt, worthlessness, rejection, psychosis, or organic brain syndrome.

5. Suicide is not a single specific disease and is not limited to any one age group, sex, or socioeconomic level.

6. Suicide is not considered an immoral act in all societies.

7. Suicide cannot be controlled by legislation. England, for example, with laws against suicide, has a suicide rate almost twice that of Scotland, where no such legislation exists. Such laws may actually deter people from seeking medical advice after attempted suicide.

8. There is no evidence to support a genetic factor for suicide. More than one suicide may occur in a family and the suicidally inclined may need to be watched carefully on the anniversary of the death of spouse or relative, but there is no reason to believe that suicide runs in families.

AIMS OF STUDY

As already stated, this article comes at the very beginning of a research project on suicide in Mississippi. Through the cooperation of two Veterans Administration Hospitals, the University Hospital, and the Mississippi State Board of Health, material is being gathered on both attempted and completed suicide. During the coming months, private physicians of the state who have attended suicide victims will be asked to contribute information on those patients. Some of the questions it is hoped may be answered through this study are: (1) Why Mississippi has one of the lowest suicide rates in the nation (the large Negro population and still essentially rural society are known to have an influence, but it is not known that they are solely responsible for the rate); (2) Whether the reporting of suicide over the state is reasonably accurate or whether many suicides are "concealed," perhaps out of consideration for the family; (3) Whether increased industrialization and urbanization has affected or is affecting the suicide rate; (4) What the medical diagnoses, physical and/or psychiatric, of the suicide victims were; (5) Whether the individuals had been previously hospitalized; (6) What medications were used; (7) What sort of psychotherapy was supplied; (8) Whether there were threats or gestures prior to the completed suicide; (9) Whether there is any indication of an epidemiological factor in occurrence of suicide—that is, whether groups of suicide occurring in certain areas are causally related.

It is our hope and belief that the ultimate results of a study of suicide in Mississippi will provide new insight into this age-old medical, psychological, and sociological problem and that the practicing physician will thereby be provided with additional facts to aid him in recognition and treatment of the suicidal patient.

For those who would like to read further on the subject, the following recent books on suicide are recommended:

1. Shneidman, Edwin S., and Farberow, Norman L., editors: Clues to Suicide, New York, McGraw-Hill Book Company, 1957.
2. Shneidman, Edwin S., and Farberow, Norman L.: The Cry for Help, New York, McGraw-Hill Book Company, 1961.
3. Williams, Granville: The Sanctity of Life and the Criminal Law, New York, Alfred A. Knoff, 1957. ★★★

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6. Veterans Administration, Department of Medicine and Surgery: Medical Bulletin, MB-7 (March 1) 1961.

CAUTION: COMMITTEE AT WORK

With tongue in cheek, the National Society for Medical Research offers this advice to committee chairmen wrestling with difficult assignments:

—Begin by blaming the problem on general apathy, the H-bomb, or a general decline of morals.

—Admit that you don't have *the* answer; this excuses your not having *any*.

—Say that we mustn't move too rapidly; this avoids the necessity of getting started in the first place.

—Point out that the problem can't be separated from other problems; thus, it can't be solved until all others are.

—If queried by a colleague, ask what he means by the question; by the time it's clarified, it's time to adjourn.

—State that experts have struggled with this same problem; this implies identification with great minds.

—Appoint a consultant and a subcommittee to study the issues.

—Express thanks for the problem as having stimulated discussion, contributed to intellectual growth, and challenged our thought.

—Plan a future meeting for evaluation.

Peripheral Arterial Injuries

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Advances in vascular surgery during and since the Korean conflict have been instrumental in lowering the amputation rate following injury to the major artery in an extremity. With the advent of better synthetic graft materials and improved surgical techniques, the necessity of ligating an injured artery in an extremity has fortunately become obsolete. The surgeons in smaller hospitals are now capable of caring for the major arterial injuries encountered in civilian practice.

No special equipment is required except for the plastic prosthesis and arterial suture material along with adequate amounts of whole blood for replacement.

EXPERIENCE GAINED with major arterial injuries in the Korean War revolutionized the management of these injuries in both battle casualties and civilian life. The realization that direct repair of injured arteries could and should be carried out in forward installations became apparent during the latter part of the Korean conflict. Thus, the management of peripheral arterial injuries is now within the realm of surgeons in small hospitals.

According to Morris,[8] civilian practice should provide the most favorable circumstances for primary repair of arterial injuries. His series of arterial injuries from June 1949 to June 1959 illustrates the benefits of improved techniques and graft materials (Table I). The last period (June 1956 to June 1959) in this series presents an increasingly lower amputation rate. The arterial injuries sustained in battle frequently had extensive nerve, bone, and soft tissue trauma which further complicated therapy. DeBakey and Simeone[2] reviewed 2,471 arterial injuries of World War II and found that 68.6 per cent of the amputations were necessitated because of massive trauma, 19.5 per cent because of vascular injury per se, and 11.9 per cent for infections (Table II).

TABLE I

MORRIS, *et al.*—220 ACUTE ARTERIAL INJURIES IN CIVILIAN PRACTICE[9]

	Total Arterial Injuries	*Number Repaired*	*Number Amputated*
June 1949 to January 1953	31	13	5 (16%)
January 1953 to June 1956	105	80	7 (6.6%)
June 1956 to June 1959	84	74	3 (3.6%)

In contrast, the arterial injuries seen in civilian practice are usually from lower velocity missiles, i.e. knife wounds, blunt trauma, or associated fractures. Consequently, the extent of nerve, bone and soft tissue trauma rarely approaches that seen in a battle wound. In addition, the average interval from the time of injury to surgery in Korea was 9.2 hours, whereas, in a large civilian series[9] the

TABLE II

AMPUTATIONS IN ARTERIAL INJURIES IN WORLD WAR II
Total Arterial Injuries: 2,471
(DeBakey and Simeone)[2]

	% of Amputations
Massive Trauma	68.6
Vascular Injury	19.5
Infections (such as clostridial myositis)	11.9

Read before the 75th Semi-annual Meeting of the Delta Medical Society, Greenwood, April 12, 1961.

average time lag was 4.5 hours. Several authors have stressed the importance of the time factor in arterial injuries.[3, 9] The civilian surgeon therefore experiences a considerable advantage over his military cohort because of the shorter interval from injury to surgery. Thus, the incidence of amputation following arterial repair in civilian injuries has been less that those seen in military injuries[9] (Table III).

TABLE III

INCIDENCE OF AMPUTATION FOLLOWING ARTERIAL REPAIR[9]

	Number of Arterial Repairs	*Number of Amputations*
Military:		
Jahnke & Howard	58	6
Hughes	79	9
Spencer & Grewe	89	21
Civilian:		
Morris, *et al.*	167	11

DIAGNOSIS

The diagnosis of major arterial injury is usually established by the history and physical examination. The type and site of the wound are of paramount importance (Fig. 1). Palpation and auscultation in the areas adjacent to the wound are to be stressed. Otherwise, a thrill or bruit cannot be detected and the presence of an arteriovenous fistula will be overlooked. Rapid swelling of the extremity, too early for inflammatory edema, should lead one to suspect hemorrhage into surrounding soft tissues.

DIAGNOSIS OF MAJOR ARTERIAL INJURY

IMMEDIATE:
1. INSPECTION OF THE WOUND
 A. TYPE
 B. SITE
 C. PALPATION AND AUSCULTATION
2. DIMINISHED OR ABSENT PULSE DISTAL TO THE INJURY
3. SHOCK—OR HISTORY OF SHOCK

LATE (SEVERAL HOURS AFTER INJURY):
1. COLDNESS
2. PALLOR
3. SEVERE PAIN
4. SENSORY CHANGES

DIAGNOSTIC ADJUNCTS:
1. ARTERIOGRAPHY
2. SURGICAL EXPLORATION

Figure 1

In the classic peripheral arterial injury, the distal pulses are absent. Absent pulses, however, do not always mean thrombosis or severance of the major artery in an extremity. Severe arterial spasm may be present without mechanical injury of the vessel and can mimic a thrombosis or complete laceration. Edwards and Lyons[3] emphasize that a perivascular hematoma from a torn smaller branch may give rise to compression and aggravate spasm. On the other hand, the presence of pulses distal to the injury does not exclude major arterial trauma. Occlusion or injury of the profunda branch of the femoral or of the brachial artery is

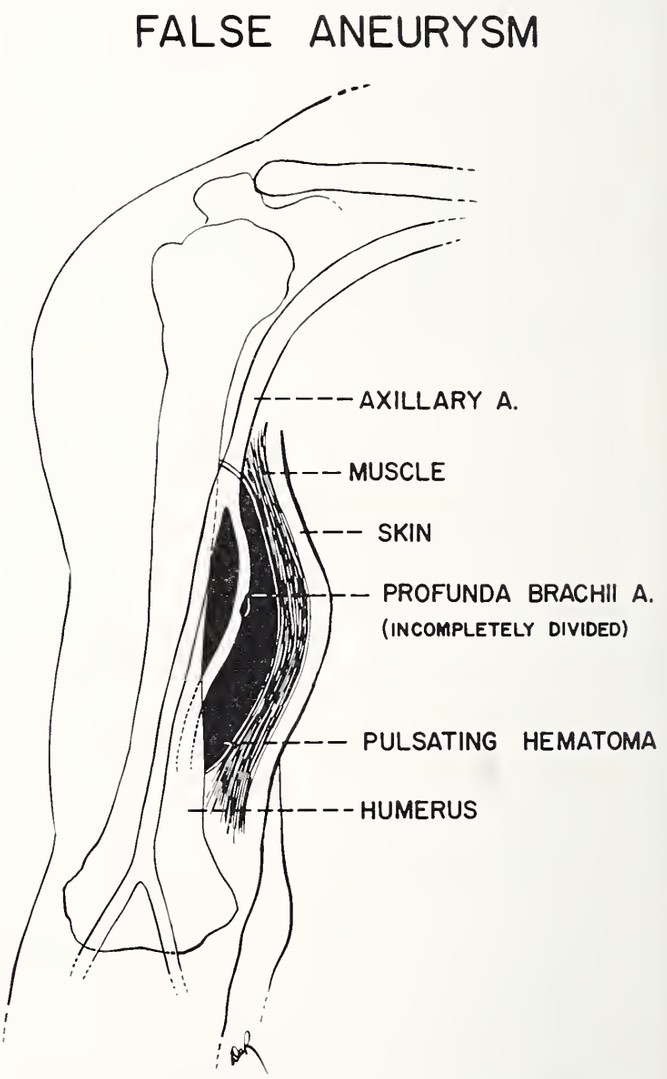


Figure 2. This illustrates how a major vessel can be injured and a normal pulse still be palpable at the wrist. This is also true in the profunda branch of the femoral artery. (Hardy.[5] Reprinted by permission of the J. B. Lippincott Company and the author.)

often associated with a normal pulse at the foot or wrist[5] as seen in Fig. 2. Also, an incomplete laceration of a major artery can be associated with normal distal pulses.

The presence of shock or a history of shock is extremely important in establishing the diagnosis of an arterial injury. In Korea, 38 per cent of the patients arriving at one hospital were in shock even after some replacement therapy.[6] In a large civilian series of injuries 66 per cent of the patients arrived in shock.[9] It is important to remember that the patient may lose approximately 20 per cent of his blood volume before showing clinical evidence of shock. One should also bear in mind the fact that shock is much more common following arterial injury than following venous injury.

The late manifestations of arterial injury are coldness, pallor, severe pain, and sensory changes. These changes gradually become more pronounced and, with time, progress to gangrene.

Arteriography is an important diagnostic adjunct. When there is doubt regarding arterial integrity in an extremity, an arteriogram will frequently decide the issue. If there is still any doubt after arteriography, surgical exploration is indicated, particularly if there is ischemia in the extremity distally. Gunshot wounds require more frequent exploration than knife wounds since there is generally more need for debridement of the wound.

TYPES OF MAJOR ARTERIAL INJURY

Contusion with or without thrombosis results most frequently from blunt truma or in association with fractures. This type of injury can also occur as the result of a blast effect from a gunshot wound. The resultant damage to the vessel wall may cause an intramural or intraluminal thrombus with occlusion of the lumen. Severe arteriospasm is often associated with this injury.

False Aneurysm

Incomplete laceration of an artery may result in formation of a false aneurysm. Blood is lost into the surrounding soft tissues and a clot is formed. A persistent communication between the artery and the organized clot gives rise to a slowly enlarging, pulsatile mass. The time required for development of a false aneurysm is variable. Some may become apparent in a few days, others not for several weeks. Contusion of an artery with subintimal injury may occasionally give rise to a true aneurysm.

Arteriovenous Fistula

A penetrating injury of an artery and the adjacent vein may result in an arteriovenous fistula. As a rule, shotgun wounds more frequently give rise to arteriovenous fistulas than single missiles. In this entity there is a persistent communication between the artery and the vein. The traumatic fistula may appear in any area where an artery and vein are lying side by side. In a series reported by Hardy[5] the arteriovenous fistulas occurred as illustrated in Figure 3. The fistula remains patent because of the higher arterial pressure coupled

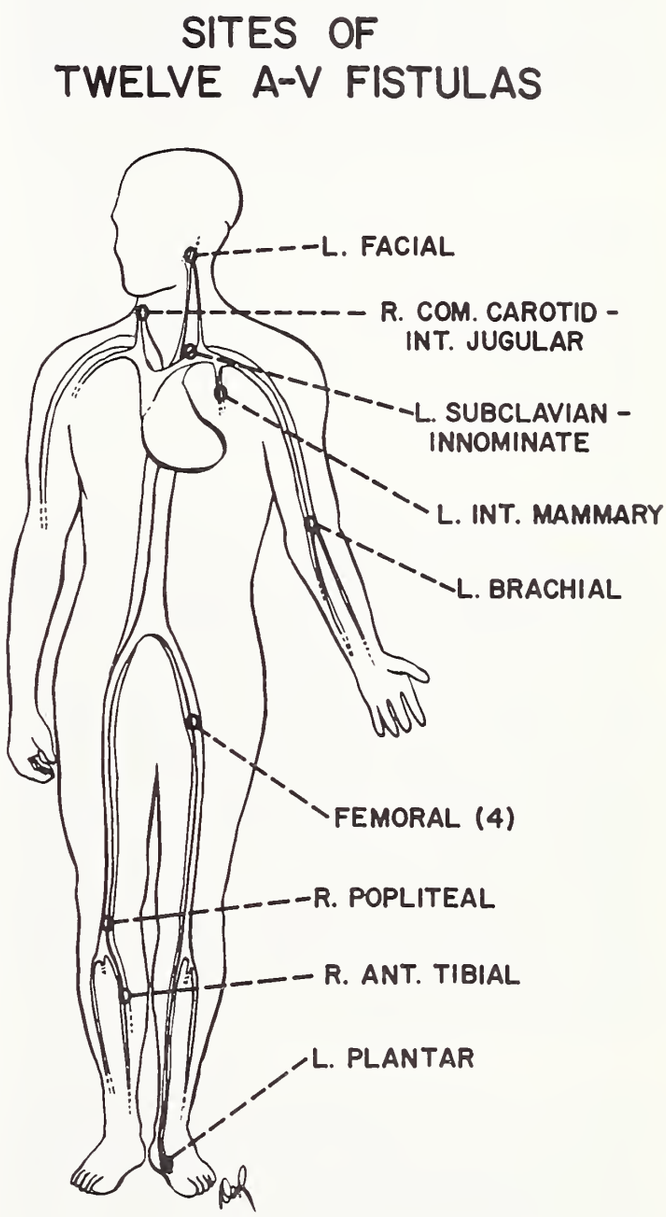


Figure 3. The sites of 12 arteriovenous fistulas are depicted as reported in one series. This further emphasizes that a fistula can occur in any area where an artery and vein are in close proximity. (Hardy.[5] Reprinted by permission of the J. B. Lippincott Company and the author.)

with a surrounding inflammatory reaction which fixes the arterial and venous walls in close proximity. The appearance of a thrill or bruit may occur shortly after injury, or weeks or months later.

Laceration

Complete division of an artery is usually the result of a gunshot or knife wound in civilian practice. Following division of the vessel, the divided ends contract and retract with formation of a clot to diminish or stop the bleeding. In an incomplete laceration where the vessel is still intact, the blood loss may be much greater due to the inability of the vessel to retract.

TABLE IV

RELATIVE FREQUENCY OF INJURY TO MAJOR ARTERIES[9]

	% Involvement
Brachial	25
Femoral	17
Radial-Ulnar	15
Aorta	10
Subclavian-Axillary	9
Carotid	8
Iliac	8
Popliteal	6
Tibials	2

Clinically, following complete division of the major artery to an extremity there is coldness, pallor, absent pulse distally, and pain in the entire extremity. The ischemic pain may be quite prominent. Loss of arterial substance clinically presents a picture identical with complete division of an artery.

The arteries most frequently injured in a large civilian series[9] were the brachial and femoral. The relative frequency of involvement of other vessels is illustrated in Table IV.

MANAGEMENT

Contusion without thrombosis may be carefully observed once the diagnosis has been established. Again, arteriography will be a useful tool in arriving at the correct diagnosis. Sympathetic nerve blocks should be employed if there is a significant degree of ischemia due to arterial spasm. Brachial plexus block or spinal anesthesia have been advocated by Edwards and Lyons in lieu of sympathetic blocks.[3] Sympathetic blocks will cause dilatation of the collaterals and may not directly affect the spasm in the larger artery. This procedure should not be depended upon then as the definitive measure to save an injured extremity. Prolonged arterial spasm should be avoided since it may lead to thrombosis. When severe arterial spasm is encountered at exploration, it can often be relieved by the use of a 2.5 per cent solution of papaverine hydrochloride. The papaverine solution is used to soak sponges and these should be left in contact with the vessel for 15 to 20 minutes.[3]

Contusion With Thrombosis

Intraluminal thrombosis requires exploration of the involved vessel with removal of the thrombus. If the involved segment does not appear vi-

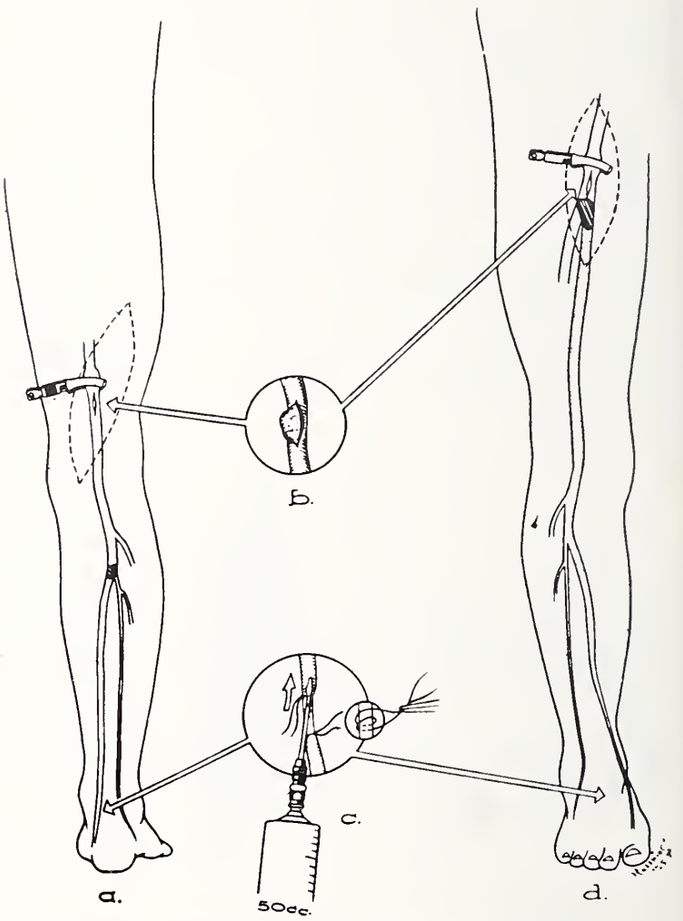


Figure 4. Retrograde Flush Technique. "A" illustrates proximal arteriotomy in the popliteal artery. "B" illustrates extrusion of clot thru the arteriotomy accomplished by retrograde milking. Then a cannula is introduced into the posterior tibial artery, "C" and 50 cc. of warm saline are forced through the vessel with as much force as is manually possible. The clot is forced out through the proximal arteriotomy by this maneuver. (Crawford and DeBakey.[1] Reprinted by permission of the C. V. Mosby Company and the authors.)

able or there is an intimal tear, resection with end-to-end anastomosis may be necessary. If the defect is over 2-3 cm. in length, a graft may be required. One should make certain there is adequate retrograde flow from the distal segment. If not, it may be necessary to utilize the retrograde flush technique advocated by Crawford and DeBakey as illustrated in Figure 4.[1] Postoperatively, continued regional sympathetic blocks may be of some value. The use of heparin systemically has not produced any definite benefits.

False Aneurysm

There are three alternative methods for treatment: (1) excision and lateral suture, (2) excision and end-to-end anastomosis, and (3) excision and grafting. Excision and lateral suture is not often feasible. Most of these lesions require resection with or without use of a graft.

Arteriovenous Fistula

Formerly, arteriovenous fistulas were allowed to become chronic and then, after supposedly adequate collateral circulation had developed, the fistula was excised by quadruple ligation. Quadruple ligation is no longer employed except in smaller vessels where the artery and vein can be sacrificed without fear of subsequent gangrene. At the present time, arteriovenous fistulas are operable as soon as the diagnosis is established.

In larger vessels the fistula may be divided and lateral suture of the artery and vein performed. Some will require excision of the involved arterial segment, with or without a graft. In all of these fistulas every attempt should be made to preserve the involved vein.

Laceration

In laceration and/or loss of arterial substance, excision of the injured portion of the arterial wall with suturing of the defect is possible in the larger vessels. However, it is more often necessary to resect the damaged segment with end-to-end anastomosis, with or without interposition of a graft. With loss of arterial substance the vessel ends are debrided and continuity is re-established with a continuous Carrel suture. Extensive dissection to gain additional length should be avoided since important collaterals will be interrupted. If the defect or gap is too great, a graft should be utilized.

TECHNIQUE AND MATERIALS

Control of the vessel is obtained proximally and distally. Use of a pneumatic tourniquet is seldom required. Serrated arterial clamps, bulldog clamps, or umbilical tapes are used to occlude the vessel. A continuous over-and-over suture of 4-0 or 5-0 arterial silk is most often employed in arterial suturing (Fig. 5).

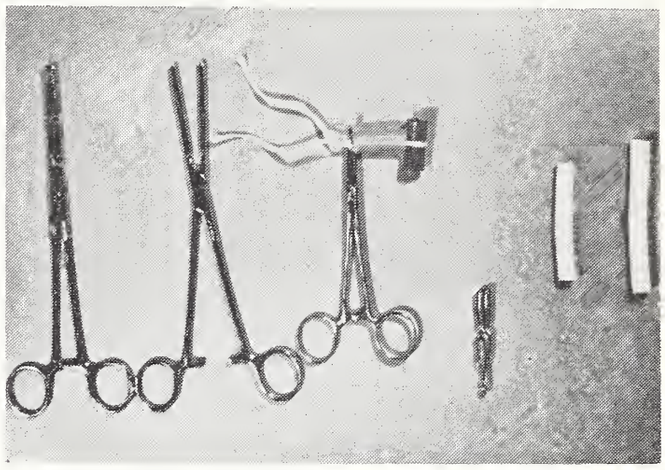


Figure 5. The various instruments used for obtaining control of an injured artery are illustrated. On the left are two Pott's clamps with noncrushing, serrated jaws. If no other method is available, umbilical tape with a small piece of rubber tubing and a hemostat will provide adequate occlusion as illustrated. Bulldog clamps are also satisfactory. Two segments of woven Teflon grafts are shown on the right next to the bulldog clamp.

The most ideal graft material is a woven, crimped Teflon tube slightly larger than the injured vessel. The qualities that make Teflon the most desirable graft material are summarized in Table V.[4] The graft should be placed with some tension on it to avoid buckling and eventual thrombosis. Preclotting of the graft is not absolutely necessary.

TABLE V

Material	*Tensile Strength*	*Tissue Reaction*	*Water Absorption*	*Attachment of Neointima*
Nylon	2 Plus	4 Plus	4%	4-6 mos.
Dacron	3 Plus	2 Plus	0.1%	3-6 mos.
Orlon	0	3 Plus	1%	3-6 mos.
Teflon	4 Plus	0-1 Plus	0%	1-2 wks. (healing: 4-8 wks.)

Ideal Graft: Woven, Crimped, Teflon (Edwards)

COMPLICATIONS

The complications of major arterial injury are listed in Table VI. The early complications need no further elucidation. The late complications of major arterial injury are seen when a patient manages to get through the acute episode but is

left with inadequate circulation in the extremity. Persistent pain in the extremity will often progress to causalgia where there is atrophy of the skin, paresthesias, and excessive sweating.

TABLE VI

COMPLICATIONS OF MAJOR ARTERIAL INJURY

EARLY:
1. Severe Hemorrhage
2. Gangrene—Loss of the Extremity
3. Infection
LATE:
4. Persistent Pain (such as causalgia)
5. Intermittent Claudication
6. Weakness
7. Atrophy and Contracture
8. Paresthesias
9. Temperature Changes

With the advent of primary repair, the complications of acute arterial injury will become less frequent and less severe.

SUMMARY

1. Peripheral arterial injuries can be managed by surgeons in small hospitals.

2. The evolution and continued advances in vascular surgery will reduce amputation rates in peripheral arterial trauma.

3. Civilian practice will generally yield better results in arterial injuries than those encountered in battle casualties.

4. The suspicion of major arterial injury should be entertained in all wounds of the extremities where there is shock or a history of shock.

5. The various types of peripheral arterial injuries and their management have been considered.

6. Woven, crimped, Teflon tubes are considered the most ideal graft material.

7. Continued advances in vascular surgery will reduce the frequency and severity of complications following major arterial injury in extremities. ★★★

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COMPACTOPHOBIA MAYBE?

Making pint-size cars apparently has stirred up a new occupational health hazard. The Renault Automobile Works in France has built a padded cell for its employees, just in case ". . . any of the workers become excited," an official explained. The little room is done in gray leather padding, equipped with soothing dim light, and even has air conditioning. The spokesman described the facility as ". . . a valuable addition to our first aid facilities."

Laws, Authority, and Responsibility In Public Health

A. L. GRAY, M.D.
Jackson, Mississippi

The author, who is state health officer, discusses the overlapping jurisdictions of state agencies in the field in public health. He explains the specific problems and suggests revision of the existing state code relating to health and medical services.

PROTECTION AND RESTORATION of physical and mental health of the individual and the population in general is one of the largest, most intense, and expensive areas of interest in modern society. Entwined in this complex field of interest are rapid development of scientific progress, commercial competition, quackery, intrigue, fraud, individualism, professionalism, doubts, fears, hopes, faith, charity, and above all anxiety and confusion in the individual and public mind. All of this is because of the innate impelling desire of the individual to live as long as possible with freedom from physical and emotional pain and suffering.

To become hopelessly overwhelmed with confusion in the fields of health preservation and restoration, one only needs to casually review the fields of communication, advertising, insurance, private and public medical care, professional licensure, voluntary health movements, and scientific medical development, each abetted or restrained by laws and regulations at federal, state, and local levels or the lack of them. Despite the fact that *total* health of the individual and community is a *total,* federal, state, and local laws and regulations have, over the past 20 to 30 years, promoted the present monstrosity in health protection and restoration. I say it is a monstrosity because this word has at least two meanings according to Webster which succinctly fit the present situation as follows: malformed, shockingly wrong, or ridiculous.

This is the product of laws which are now archaic, superimposed, piece-meal amendments to archaic laws, and adoption of new laws, each relating only to minor segments of the total effort and problem. Most of these amendments and laws were instigated by special interests without review and consideration of the total needs of individual and community health. I could relate many examples of this if time permitted. This piece-meal legislation of the past has led to the present chaotic tax-supported programs designed to provide better health through preventive and curative medicine in a multiplicity of separate agencies of the state.

I recognize the fact that no individual or group of individuals now living is responsible for the confusing public medical and health machinery of today. Modern public medical care and health protection potentials of today cannot possibly be realized in the present framework of fragmented and overlapping multiplicity of divergent efforts through the several state departments now having some legal responsibility and authority. In the situation now existing in the state's and counties' efforts to meet needs in public health protection and medical care there is bound to be wasteful overlapping in expenditure of public funds which the taxing units can ill afford. Because of rapid developments in the complex scientific fields of health protection and medical correction competency, there are also many voids in the existing laws to assure efficient application of medical and health care capabilities and to prevent further development of quackery which thrives on anxiety and confusion.

May I point out that health and medical care services are rendered by licensed physicians, den-

Read before the Section on Preventive Medicine, Mississippi State Medical Association, 93rd Annual Session, Biloxi, May 9-11.

tists, nurses, pharmacists, technologists, trained health workers, and allied hospital and other people with basic medical and health fields. These professions are the instruments through which the scientific health preservation and physical and mental restoration are secured either by tax funds, voluntary funds, or on a private basis. They are interdependent and comprise the basic team for health protection and restoration. Regardless of the present divergent and hopelessly fragmented authority through which the various fragments are administered, these professions must apply the basic knowledge and techniques in unison and mutual, supportive cooperation. The wholeness of medical and health needs seems to demand a wholeness of governmental effort at state and local levels to meet these needs not otherwise met, in order to make the task of rendering the service less confusing, more economical, and more effective, and to give the professions which render the basic service a greater opportunity to evaluate and provide all facets for the benefit of those being served.

By no means am I suggesting more and new types of tax-supported services. I do not know whether such is needed or not. The trend seems to be in the direction of more tax-purchased medical services as indicated in the Kerr-Mills legislation. As it has been interpreted in this state, it puts into motion at least temporarily still another medical and health agency to add to the present cumbersome system of tax-supported medical and health services, and in this instance, in a department that has no medical and health competency.

STATE HEALTH PROGRAM

May I be somewhat more specific in explaining the preceding statements. First, the basic authority and framework of organization of the State Board of Health and its 82 component full-time county health departments conduct a statewide program of preventive and corrective health services in cooperation and with general support of all the recognized professional groups who render the diagnostic treatment and corrective services. This total program of health protection and correction is administered by approximately 50 full-time physicians, 250 nurses, one dentist, and approximately 700 supportive allied health-trained and experienced employees. They work hard for, and generally maintain, effective relationships with private physicians, dentists, pharmacists, nurses, and other professionals who must render the various professional services necessary to prevent illness and restore health.

Fortunately for the health of Mississippians, this group of health-trained people are not buffeted by political whims. They work with all state agencies having some responsibility in administering segments of medical and health care because there are no other local health-oriented workers on whom to depend. This is the only state department having health and medically trained people decentralized in every county in the state and having public health facilities within immediate reach of every citizen of the state. Excluding the state-supported institutional staffs, the State Board of Health has many times more health and medically trained workers than all other state departments combined, each of which has some health and medical care responsibility. Indeed, for some of the health and medical programs financed and administered by other state departments, the county health department is the focal point of dependence and program effectiveness.

COSTLY FRAGMENTATIONS

Now I should like to point out a few facets of the costly fragmentations of the efforts through taxation to meet the needs of publicly supported health protection and medical care. What I shall say about efforts of state departments and their employees to meet their responsibilities and authorities under present law is in no way critical of any department nor individual. It is merely to point out examples of expensive fragmentation of medical and health services. Examples of this are as follows:

1. Medical and health services are lodged in the State Department of Education in the Crippled Children's Service and Vocational Rehabilitation. Certainly, the vocational counseling, guidance, and education of the recipients of these services logically belong in the field of education. I am just as convinced that the physical and emotional restoration services belong in the departments having medical and health orientation. In fact, Mississippi is one of only two states in which the responsibility for crippled children's services rests in the department of education. Even in this state, the state and county health departments markedly support this service with casefinding, referrals, clinic quarters and operation, and case follow-up without any financial support from Crippled Children's Service.

2. Correction of physical defects is another area of health services in which the responsibility is split between the State Board of Health and State Department of Education. Here the defects are detected primarily by school health examination by county health departments who also do the necessary follow-

up and referrals, yet the funds to assist in correcting the defects for indigent children are jointly administered by the State Department of Health and the State Department of Education. This makes for complexity of administration which seems to be unnecessary.

3. The state chemist has authority and responsibility for certain chemical analyses for the evaluation of and control of human health hazards. In the present complex environment of chemicals and drugs as relates to human health, it may be more logical to focus that portion of the responsibilities and authority of the state chemist relating to health protection in the public health framework where there exist medical and health-oriented chemists, physicians, and other scientists.

4. In the field of food and drug control, some minor degree of control authority and responsibility rests in each of the State Board of Pharmacy, State Board of Health, and State Department of Agriculture. The efforts of these departments are not correlated. No one of these agencies has enough authority nor competency to be effective in the face of the rapidly increasing complexities of the food and drug industries. Mississippi is one of a few states which has no effective food and drug law to support and parallel the Federal Food and Drug Laws. As a result Mississippi becomes the victim of fads, mislabeling, no labeling, uncontrolled quackery, and promiscuous peddling of dangerous drugs, which are not permitted in other states. This is evidenced by the receipt of numerous inquiries each month from promoters all over the nation about the requirements to sell this or that or practice this or that in Mississippi. The obvious answer under present laws is that one can peddle practically any food, fad, drug or apparatus in Mississippi regardless of its usefulness or hazard to the consumer.

5. The professions licensed to guard and restore the health of Mississippians are:

a. Physicians, podiatrists, and osteopaths—licensed by the State Board of Health.

b. Pharmacists—licensed by the State Board of Pharmacy.

c. Dentists—licensed by the State Board of Dental Examiners.

d. Nurses and practical nurses—licensed by Nurses' Board of Examination and Registration of Mississippi.

No one of these agencies, who protect the public and professions, has any effective degree of investigative service to determine and assure proper conduct of their respective licensees. Consequently, there are deviations from ethical practice in all of these groups. Much more serious than this is the encroachment on each of these fields by charlatans, quacks, crooks, and deadbeats who have no qualifications except capability in fraudulent claims and salesmanship, all to the detriment of general health and economic well-being. Laws should be provided which would at least set up and support investigative service for all these professions, first for the protection of the public, and second for the protection of legitimate health professions. This investigative service should all be in one agency. In addition, some new and essential professions have entered the field of medical and health care and restoration. I speak particularly of clinical psychology and physical therapy. The nature of their field of work is such that it could, and will, rapidly become an entree for many types of dangerous frauds to victimize the public. These professions should be recognized under law by either certification or licensure on the basis of acceptable training, and such laws should prescribe their field of activity under medical guidance.

In conclusion, I reaffirm that the complexities of the present fragmented efforts to meet the needs will not be clarified until all the laws relating to health protection and medical and hospital services provided by tax funds are changed to provide for:

1. A greater degree of oneness and correlation of all institutional care supported by state and local tax funds.

2. A move toward placing the administration of all noninstitutional medical and health tax-supported programs in the official existing health agency which has basic health professional representation in all counties. The medical, nursing, and other health personnel in all health departments have for many years contributed much assistance to all other fragmented medical and health efforts of other agencies, each of which is conducting medical programs in limited fields.

3. A licensure program which would bring closer correlation of licensure of physicians, dentists, nurses, and pharmacists, and also for certification of clinical psychologists and physical therapists.

4. Investigative personnel and authority for enforcement of food and drug laws.

Revision of laws in these directions and their implementation would likely save considerable sums of tax money in the over-all administration, and more than these are deemed necessary for the promotion of the health and protection and control of those who render medical and health services. The Legislature would be a tremendous benefactor to Mississippi through a very thorough study of the present wasteful, overlapping, deficient efforts by the several state departments under laws and on the basis of this study to revise the whole code relating to health and medical services and provide for an understandable total effort in this field. ★★★

2423 North State Street

Clinicopathological Conference XXIII

Conducted by the Department of Pathology
University of Mississippi School of Medicine
Jackson, Mississippi

The disease involved in CPC XXIII falls into three phases. In the first, the patient complained of pain in his legs but was still ambulatory. In the second, he developed a number of systemic manifestations such as fever, nightsweats, and weakness. His appetite failed, edema appeared, and he became increasingly lethargic. Stage three occurred on his 25th hospital day. There was a sudden onset of dizziness, conjugate deviation to the left and nystagmus to the left, and sweating, and generalized seizure was encountered with twitching on the left side and turning to the left, gradually progressing in a Jacksonian march to involve the whole body in a clonic seizure.

Discussers are Drs. John R. Snavely, Robert D. Currier, Robert D. Sloan, Joel Brunson, and Herbert G. Langford.

Dr. John R. Snavely: "We are dealing with an illness that carried off a previously healthy man in about four months, and this is fast indeed. We can also say that this man was studied very thoroughly at another hospital without an adequate diagnosis being made and that he was studied about as well as I believe we can study anybody here, and I suspect that no one felt completely secure about the diagnosis.

THREE PHASES OF HISTORY

"As I hope is also evident to all of you, the history of the disease falls into three phases. In the first one, the patient is able to get around but has symptoms of pain in his legs. In the second phase, to this symptom are added fever and a lot of systemic manifestations. In the course of this deterioration, it becomes evident that he has diabetes and involvement of skeletal muscles, peripheral nerve, brain, heart, possibly pancreas, and kidney. The last phase of his illness is dominated by a cerebral catastrophe of some sort, which we shall assume is intrinsic to the process, although there is no way to be absolutely certain of this.

POSSIBLE DISEASE PROCESSES

"The types of disease processes that will produce this many types of manifestations are ones with obviously wide dissemination. In general, they turn out to be one of three things. A widely disseminated infection of some sort is one possibility. Here one thinks of tuberculosis with terminal miliary spread, some fungus infection, or an infectious process going on in the kidneys with terminal dissemination perhaps facilitated by the presence of diabetes and the characteristic lack of resistance to infection that diabetics have. Another category of possibility is some kind of widely disseminated tumor. Here one thinks of certain lymphomas, particularly Hodgkin's disease and certain highly anaplastic lesions which metastasize diffusely. I mention these two only, however, to dismiss them because a much more attractive possibility is available—that we are dealing with one of the collagen vascular diseases with a disseminated vasculitis producing manifestations in many organs. As a matter of fact, we are handed this diagnosis on the basis of biopsies. One could, of course, resort to CPC-manship and say that this is much too obvious. I will resist this solution and try to trip myself on something else, but this case is such a reasonably characteristic example of polyarteritis or a related disease that I strongly suspect this will be my working diagnosis at the end. I am going to proceed through the protocol picking out certain features and then I am going to ask Dr. Robert D. Currier, our neurologist, to elaborate on his views not only on the basic diagnosis but more specifically on the terminal catastrophe.

ORIGINAL SYMPTOMS

"This man began to be sick with pain and numbness in his legs. At first this developed only with exercise but later began to be present at rest. Shortly thereafter he developed a number of systemic manifestations such as fever, nightsweats, and weakness. His appetite failed and he began to lose weight. Edema appeared and he became increasingly lethargic. Examination at this time was not helpful save for a few nodes. Pulses were detectable in all extremities. This is important because we are concerned with a possibility of some peripheral vascular disease producing claudication. There was a trace of albumin. By this time there was anemia and from the two measurements offered us, the hemoglobin and the hematocrit, we can calculate the mean corpuscular hemoglobin concentration which is within normal limits, militating somewhat against iron deficiency.

"About this time it became evident that there was a polymorphonuclear leukocytosis which at first was manifested more by a shift to the left than by a quantitative increase but later (and this theme continues to recur throughout this protocol) there was a brisk leukocytosis, polymorphonuclear. This is somewhat out of proportion, I believe, to the other infectious elements of his disease. A little bit later we are told that he has 7 gm. of total protein with about half albumin and half globulin. The hypoalbuminemia, of course, would go well enough with the chronic starvation which probably was present, but the hyperglobulinemia does raise the possibility of a tucked-away infection and, of course, is equally compatible with collagen disease. The collagen disease which most conveniently matches the picture described is polyarteritis nodosa.

BACK DIFFICULTIES

"There are some difficulties with the back. We are not told what specifically is going on here, but there is narrowing of the lumbosacral space, and it is attractive to think that some of the peripheral signs might be related to this lesion. I doubt it because I think the neurological signs would have been a little more specific were this the cause, but perhaps Dr. Currier will elaborate on this. I think this is probably a red herring.

"The doctors at this other hospital carried out a thorough study and decided to undertake an exploratory laparotomy. I feel that this was a wise decision. In this type of patient one often encounters things like retroperitoneal lymphoma, such as neoplasm of the liver or kidney which has not been diagnosed otherwise, or occasionally one encounters sepsis involving the biliary tract. None of these things was found to be present, and it was essentially a negative lap.

TRANSFER TO UNIVERSITY

"At this point he was transferred to University Hospital. Here, nothing very useful was added. There were a few submaxillary nodes. There was a systolic murmur, enough to make someone think of a very indolent bacterial endocarditis with negative blood cultures, but I don't find enough else to go along with this diagnosis to make me consider it very strongly. There was absence of the ankle jerks, and I suppose that this could go with the dysesthesia that has been mentioned. There were other signs of peripheral neuropathy. An electrocardiogram was abnormal. There was more albumin in the urine than there had been previously. The serum albumin had fallen. The globulin had become somewhat higher. The liver tests were not particularly helpful. The elevation in the zinc turbidity goes with the increase in globulin and more specifically indicates that this increase is in a large part due to gamma globulin.

LUMBAR PUNCTURE

"A lumbar puncture was performed and did yield something positive: 24 cells, 95 per cent of which were polymorphonuclear leukocytes. Now this I find difficult to work into our diagnosis of polyarteritis although I do not believe it militates very strongly against it. It does raise the possibility that some kind of infectious process is going on, not enough perhaps to lower the spinal fluid glucose but just enough to start stirring up a leukocytic response in the leptomeninges. Such a situation could be embolic disease as a part of sepsis or could reasonably be miliary tuberculosis which had just begun to seed the meninges. I mention this only to be a little nervous about it, but I am not given enough data to make this diagnosis with any firmness.

"The glucose tolerance curve shows a diabetic pattern. We are not told the state of nutrition before this curve was done. If a patient is starved carbohydrate-wise for a period and then a glucose tolerance curve is done, there is momentarily a diabetic type of curve. This can be reversed if the patient is fed adequate amounts of glucose for three or four days preceding the test. I will assume that the doctors were aware of this and that this is true evidence of diabetes albeit mild. Temperature ranged from 99° to 102°. Lots of consultants

came by and offered opinions, none of which was terribly productive.

"On one of the regimens of antibiotics, the patient became momentarily afebrile and a later biopsy showed focal degeneration of muscle fibers. Another showed some localized vasculitis. Now prednisolone treatment was begun. Prednisolone is one of the dehydro derivatives of hydrocortisone. On this drug the temperature returned to normal and I have a feeling that at this time the patient was doing well and everyone was quite pleased. They thought, 'Well, we have a diagnosis of polyarteritis nodosa and we are treating the patient with a good drug for this and he is getting better.'

THIRD PHASE

"At this time, on the 25th day of his hospitalization, the third phase began. There was a sudden onset of dizziness, conjugate deviation to the left and nystagmus to the left, and sweating, and generalized seizure was encountered with twitching on the left side and turning to the left, gradually progressing in a Jacksonian march to involve the whole body in a clonic seizure. At this time it is very interesting that his blood sugar was 192 because one of the things one might speculate about was what part the hypoglycemia was playing in the patient's condition. A lumbar puncture was done. The fluid was bloody at first but cleared so I think I would take this to militate that the blood was not coming from above but was probably arising locally. The cerebrospinal fluid protein was 125 mg. per cent and the glucose 100 per cent. I find this hard to interpret because of the contamination of the spinal fluid by blood. Further studies showed that the blood urea-nitrogen had climbed somewhat. I neglected to mention that previous creatinine clearances had shown severe impairment of renal function to about 25 per cent of what it should have been. There continued to be a brisk leukocytosis.

HEART DISEASE

"Now, further indication of heart disease became evident as there were some ST-T abnormalities suggesting anterior damage. The patient went into congestive failure manifested by venous hypertension and orthopnea with a gallop rhythm. The venous pressure was specifically measured, found to be elevated, and by this time things began to come apart in general and he expired.

DIAGNOSIS—POLYARTERITIS

"My diagnosis is going to be the obvious one, although I am aware of the other possibilities. I mention them only because I think to miss them would be a tragedy. I particularly want to reemphasize the possibility of miliary tuberculosis or some kind of low grade sepsis, originating perhaps in the G-U tract, in a diabetic whose defenses are easily breached. My own diagnosis of the terminal episode is a vascular catastrophe related to the polyarteritis. Intracerebral hemorrhage would explain the fulminating onset and the lack of blood in the spinal fluid, but I would think that it equally well could be a major vascular occlusion. So my diagnosis will be polyarteritis nodosa with a major vascular intracerebral lesion terminally with heart failure. Dr. Currier, will you elaborate on the neurological aspects of this or anything else that you see fit?"

NEUROLOGICAL ASPECTS

Dr. Robert D. Currier: "It is not going to be easy—you covered it so well. In the first place, I agree that the patient probably had a neuritis. The chief complaint of pain and numbness in the legs that got worse when he walked is a little bit confusing and not typical of neuritis, but the pain was later present at rest and this might be found in an acute neuritis affecting the legs. The ankle edema, if it were minimal, could be explained on that basis. Later on it is of interest to note that his fundi were examined and were normal. His pupils were normal. His deep tendon reflexes in the extremities were normal except for the absence of ankle jerks, and I assume that this neuritis involved only the peripheral nerves to the lower extremities. The hyperesthesia notation in the protocol probably means increased response to pain and the dysesthesia probably means that normal sensory testing such as touch caused painful response in both legs.

"The Romberg test was positive. It is hard to say what this was due to. This response is normally not found in simple neuritis but could be if the weakness were great. The plantar response was normal. The cranial nerves were intact. It would be interesting to know what his vibratory sense was because he did walk with an unsteady gait. Whether the unsteadiness was caused by posterior column disease or cerebellar disease, I cannot say. The spinal fluid was essentially normal except, as Dr. Snavely mentioned, the 24 cells which were 95 per cent polys are hard to explain.

"Of the two consultants that commented on his neurological deficit before his acute and final

episode, one diagnosed sciatic neuritis and the other diabetic neuritis. It could have been both. It could have been in the sciatic distribution and have been of diabetic origin. I should think that by the neurologic examination one should be able to differentiate between sciatic and simple peripheral neuritis with the sensory loss circumferentially in the extremity rather than just in the distribution of the sciatic nerve.

"His seizure on the 25th hospital day was very interesting to me. He had conjugate deviation of his eyes to the left and nystagmus to the left. The nystagmus probably was more in the nature of a focal seizure than a true nystagmus. One would think the deviation was from irritation rather than from distruction in which case they would have deviated to the side of a cerebral lesion. Then he had the Jacksonian march, as Dr. Snavely mentioned, and finally a grand mal seizure. A spinal tap two hours later was bloody and then clear. It would be interesting to learn what the red cell counts were in these three tubes and whether the supernatant fluid of the third tube was xanthochromic or not. In this way, the question of hemorrhage might have been definitely clarified. It would also be interesting to know what the white cell count in the spinal fluid was then.

"The next day he evidently developed signs of heart failure. An EEG was done which showed a very abnormal, diffusely slow record poorly organized with a sharp wave dysrhythmia. If the EEG was done soon after the seizure, and I assume that it was, this could be simply postictal. In other words, this could be the EEG that one would expect in anyone who had had a grand mal seizure. It did not show any focus like one might expect on the right side of the brain.

THROMBOSIS—FIRST CHOICE

"The question that is most difficult for me to answer is what went on inside his head prior to the time he died. I think a thrombosis is my first choice. A hemorrhage is a good possibility, but most hemorrhages do show changes in the spinal fluid. Assuming that the third tube of his spinal fluid was normal and did not show any xanthochromia, I would expect that this was not a hemorrhage and was a thrombosis. Another thing that we have to consider is that it might have been an embolus. The signs of his cardiac difficulty were not found until the next day but actually I suppose it could have been an embolus from the heart that went to the right middle cerebral artery. A remote possibility, and this is my hedge too, is that he might have been harboring a brain abscess which would fit in with the 24 polys that were found on the early spinal tap. I agree with Dr. Snavely on this. I think the evidence given us by the two biopsies is pretty conclusive. The rest of the picture fits in with a diagnosis of polyarteritis which may be manifested by neuritis and by cerebral hemorrhage and thrombosis. My diagnosis would be polyarteritis also."

DIAGNOSTIC FILMS

Dr. Robert D. Sloan: "A chest film at the time of admission revealed no obvious pathology. A second film, taken approximately five days before death and after the generalized convulsions, revealed an area of parenchymal mottling at the base of the right lung. The pattern is most likely a pneumonitis, and an aspiration pneumonitis would be a good possibility. Views of the skull, thoracic and lumbosacral spine were negative. The patient had several routine films of the abdomen as well as an intravenous pyelogram. On none of these abdominal films are the retroperitoneal soft tissues well defined. In such instances, one is forced to at least think of the possibility of fluid in the peritoneal cavity or some diffuse retroperitoneal pathology. The kidney outlines are not clearly visualized on the intravenous pyelogram. There is evidence of function bilaterally but the finer detail of the upper drainage tracts are poorly shown. It can be said with assurance, however, that there is no obstructive uropathy. At the end of 45 minutes, a moderate quantity of the opaque medium had passed into the bladder."

Dr. Joel Brunson: "Would you say anything specific about heart size?"

Dr. Sloan: "On the initial film, the heart size was within normal limits. It looked somewhat larger on the postconvulsion film, but this may well have been due to technical factors."

NECROPSY FINDINGS

Dr. Brunson: "The gross findings in this patient were not very striking. The reason I was interested in the heart was that he had about 200 ml. of fluid in the pericardial cavity, and we were wondering if perhaps that might have collected fairly rapidly. It would definitely have made a change in the x-ray silhouette. Other than that, the heart was of normal size, weighed about 350 gm. and showed no intrinsic lesions. The lungs were of normal weight and showed a fairly evident nodular pneumonia with considerable aspirate from the stomach in the bronchi and extending down into the lungs. In many areas this was associated with hemorrhage and nodularity. It was thought

at the time that he had probably aspirated enough to embarrass acutely his respirations.

"Now, as far as the remainder of the postmortem is concerned, there was a little excess fluid in the peritoneal cavity. The liver was about normal size. It showed a pattern of congestion with

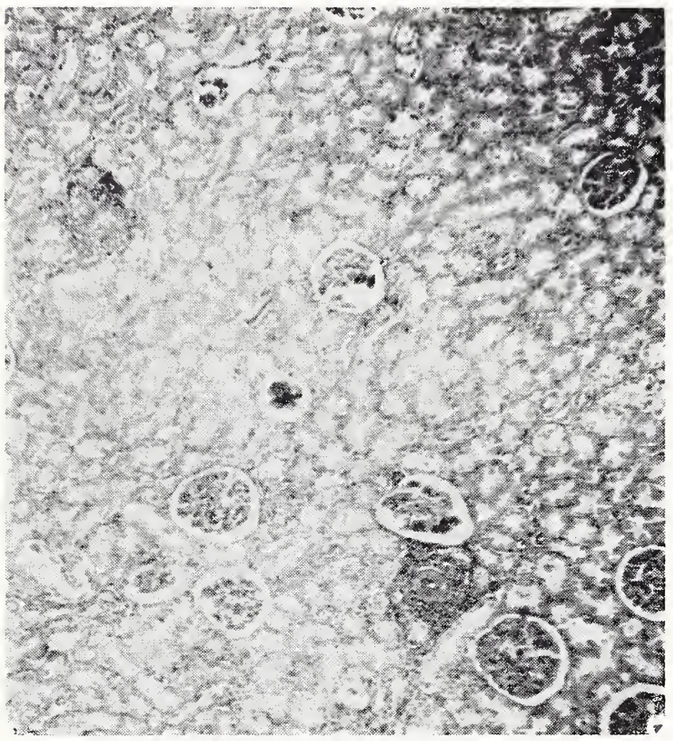


Figure 1. Low power view of kidney section. Note small artery surrounded by inflammatory cells.

very prominent vessels. The kidneys were smaller than normal and weighed about 100 gm. They showed no evident lesions other than some irregularity of the cortex suggesting an underlying chronic vascular disease. The spleen was of normal size but showed several infarcts. The brain was normal on gross examination.

"We have selected several photographs, most of which come from the kidneys, to demonstrate the nature of the vascular lesions. As one examines the renal sections microscopically, there are evident lesions of arterioles and arteries in which the walls of the vessels have been converted into a homogeneous mass of pink staining material with little evident structure. About these vessels are rather intense aggregates of inflammatory cells. This is the type of lesion one associates with polyarteritis.

"In other areas of the kidney there are lesions which appear to be slightly older than these. These are manifested by arterioles in which there is intimal thickening produced by loose connective tissue, a segmental subendothelial accumulation of hyaline fibrinoid material, and about that and throughout the vessel wall, an accumulation of inflammatory cells. The inflammatory cells are in this instance largely lymphocytes, plasma cells, and a small admixture of polymorphonuclear leukocytes. The degree of intimal proliferation has resulted in marked luminal attenuation and is suggestive of organization of a thrombus. In this vessel, all component parts are involved, and this represents a lesion which is progressing to the point of "healing." In this sense it is detrimental because it greatly narrows the vascular channel. Other vessels demonstrate more acute changes in which most of the vessel wall shows an extensive accumulation of homogeneous hyaline material and around this an intense inflammatory reaction of neutrophiles, lymphocytes, and some scattering of plasma cells.

"The hepatic vessels show a similar change, with almost complete replacement of arteriolar walls by hyaline fibrinoid material associated with a florid inflammatory reaction. Numerous vessels in the liver sections show these alterations. Similarly, in the wall of the intestinal tract there are vessels which show lesions of varied ages. Some have proceeded to almost complete fibrosis with minimal residual inflammation, and suggest that thrombosis and recanalization has occurred.

"I am surprised that this patient did not complain more of abdominal pain because the lesions are quite common in his intestinal tract and also in

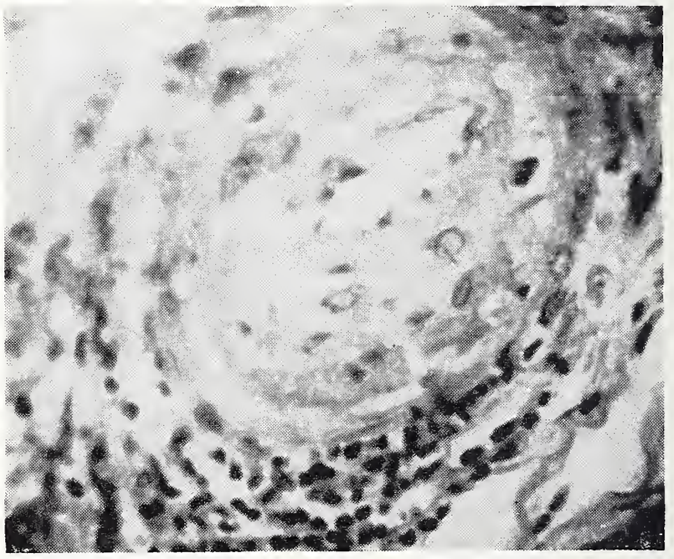


Figure 2. Higher power view of similar artery in the intestine that is in the process of "healing."

his esophagus. I wonder if this did not contribute to his difficulty insofar as swallowing and perhaps brought about aspiration of material. The sections from the lungs show a fairly acute pneumonia with extensive hemorrhage, and septal necrosis. This is the type of lesion that one associates with aspiration. It is also of interest to point out that

several of the bronchial arteries show the same type of polyarteritic process as is occurring in other vessels in other organs. At any rate, there is aspiration of foreign material down in many of the terminal bronchioles and out into the alveoli, and I think that this may have played an important role in this patient's demise. As to his central nervous system, we do not find in the dozen or so sections that we have any evident of demyelination or softening of brain. One must remember though that, generally speaking, the lesions of polyarteritis, if they occur in the central nervous system, are not too numerous as

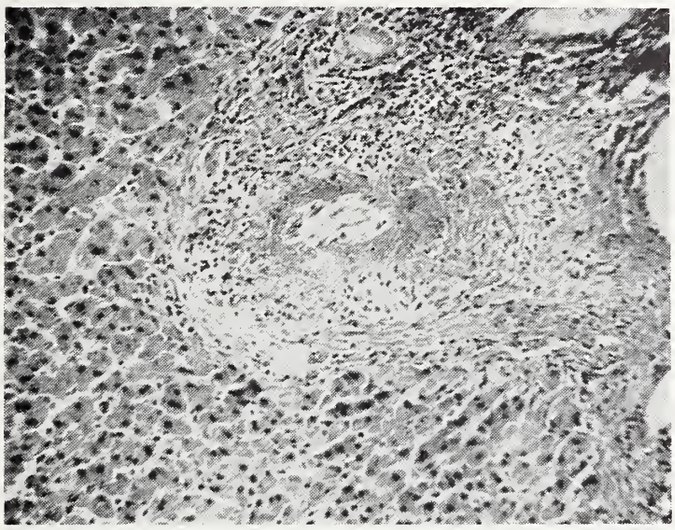


Figure 3. Somewhat larger involved artery in the liver.

compared to other organs and so it is entirely conceivable that we may have missed this, although grossly we did not see any area of softening or hemorrhage.

"So in summary, this patient has polyarteritis nodosa and in association with this a fairly severe aspiration pneumonia. We believe his neural changes, at least his peripheral neuritis, is probably related to vascular lesions of this nature in and about the larger nerves. I should have mentioned also that as a result of his previous surgery there was considerable growth of fibrous tissue into the peritoneal and abdominal cavity and at one point in the small bowel there was almost complete obstruction although there was a small lumen left in this portion of the jejunum and we would again wonder whether or not he might have had some complaints referable to his abdomen. So all in all, it makes a fairly good case of polyarteritis, and as Dr. Snavely has indicated, biopsies of muscle showed lesions which almost certainly had to be polyarteritis."

Dr. Herbert G. Langford: "A question. We did give him a great deal of steroid. Are you able to say from his histological picture that this did anything one way or the other to the course of the arteriolar lesions?"

Dr. Brunson: "I think that the effect of steriods may be to inhibit development of lesions, in the sense that fewer vascular lesions may develop. It may also enable more rapid resolution of lesions, that is, the organization of the hyaline material. However, I do not believe that it will completely prevent the development of these lesions, which progress to vascular occlusion and the consequences thereof."

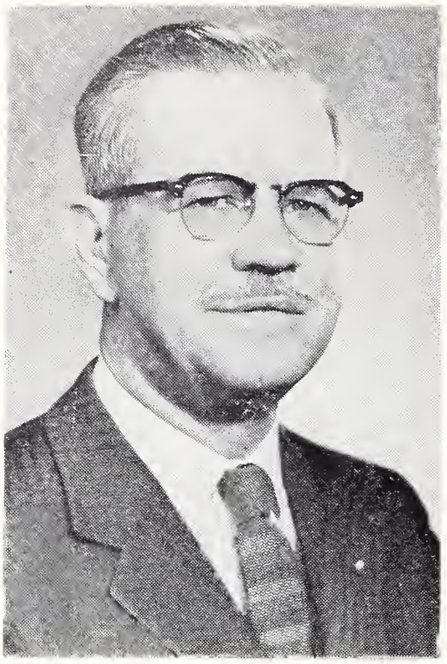
Dr. Langford: "As you probably know, the British Medical Council did a one-year survey of all the patients with polyarteritis in Great Britain in an effort to determine whether any beneficial effects resulted from steroid administration. It was their conclusion that there was not much chance of finding out because there just were not enough patients with the disease to study, and the course of the disease was so erratic."

Final Diagnosis: Polyarteritis nodosa.

2500 North State Street

STICK OR TREAT

And then there was the obstetrician who, on Halloween, put up this sign in his office to warn his patients against exposure to measles: "The globulin will get you if you don't watch out!"



The President Speaking

'Whose Image Is Showing?'

LAWRENCE W. LONG, M.D.
Jackson, Mississippi

NOT UNLIKE MILADY'S UNMENTIONABLES, is the doctor's image showing to his personal and professional disadvantage? Yes, says the AFL-CIO and others dedicated to the proposition of total federal medical care under a compulsory, socialized system. Said the *New York Times* recently, "Today in the United States there is a curious medical contrast: the patient seems fine but the doctor is uneasy." In fact, so much has been said and written about medicine's image that some physicians give undue credence to utterances like that of the *Times*.

All this uproar about the public's regard for doctors is something between a smokescreen and a calculated whispering campaign. It's a poorly kept secret that the Department of Health, Education, and Welfare recently engaged an opinion research organization to measure various professional public images. The doctor rated at the top of the scale so Mr. Ribicoff has found it necessary to use the same tired and frayed speech material in lambasting the AMA and its membership. He was probably disappointed in finding out that the medical Indians on the new frontier are such that the American braves and squaws actually like their medicine men.

Nobody—least of all the doctors themselves—denies that some very few physicians are less than totally concerned about what their patients think of them. It's only reasonable to conclude that out of 250,000 practitioners of medicine, at least a few may be without their medical good conduct medals. And these are a source of deep concern to that vast majority of competent, diligent, and fair doctors.

The acid test of the labor-liberal view of medicine's image finds it sorely wanting in a critical respect: It omits, overlooks, and ignores the public which conceives the image in the first place. It seems that the public can also have its share of unhappy souls who simply can't be pleased. But, all in all, both doctors *and* their patients are pretty good folks and neither group is being influenced by all this image hogwash.

And, by the way, ask any physician or patient what they think of Reuther's, Hoffa's, and Meany's images! ★★★

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EDITORIALS

Dr. Alice in Washingtonland

NOT INFREQUENTLY, assorted advocates of federal medical care schemes paint rosy pictures of a utopian era where doctors, hospitals, and other members of the health care team poise in breathless readiness, awaiting the slightest complaint of the patient as a signal to begin unlimited ministrations of medical mercy—with, it is to be understood, the federal government paying the bill. Such seekers of this ultimate social justice where medical care is a matter of right are Aime J. Forand, Cecil King, Wilbur Cohen, Walter Reuther, and numberless cohorts of like ilk. They have all the answers. So they say.

Now, if anything can be learned from experience—and there may be those who doubt our civilization's having advanced that far—then government-in-anything is an undisputed bust. Take, for example, American agriculture, a mess beyond definition and description. Price supports, parities, controls, surpluses, and allotments have the farmers, food and fiber processors, elected officials, and John Q. Public confused and bewildered. What's more, there is an enormous bill to pay for this folly.

Federal medical care would be no different because where government intrudes upon a working system in the private sector, strange things begin to happen to the economics inherent in its formerly successful operation.

★ ★ ★

During 1961, the incumbent administration at Washington has paid out $750 million to farmers to reduce corn and sorghum acreage. The idea was to produce less than the nation needed to meet current demand for these small grain crops, thus forcing utilization of the surplus of previous years which the government had purchased and stored. Sounds good, doesn't it? Two factors, unfortunately, were overlooked.

First, agriculture secretary Orville Freeman failed to outwit nature and second, he goofed on his pricing policy. With the benefit of favorable weather and technological advances in agriculture (largely through federally subsidized research), the corn crop was just as big with the reduced acreage as before. Then, with some groggy notion of stabilizing small feed grain prices, Mr. Freeman offered the surplus corn at a market price of $1.04 per bushel while supporting the 1961 crop at the price-prop of $1.20 per bushel.

What happened was that farmers promptly sold their current harvest to the government, then purchased what they needed from federal surplus stocks at the lower cost, and pocketed a neat 15 per cent profit over and above earnings on the 1961 crop. It's all legal, too.

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Then there are a couple of interesting side effects from these economic shenanigans. The cheap corn may promote a glut in the hog market, causing an unnatural slump in pork prices. And already, the cheaper feed prices are causing overproduction of milk—5 per cent more than the country can consume—so the government, under the law, must now buy 189 million pounds of surplus butter.

Of this situation, the *Wall Street Journal* wryly commented that ". . . you can readily see how wonderful it is when our masters in Washington start stabilizing things and getting them all straightened out for us incompetent citizens."

So what do all these agronomy antics have to do with medical care? Just this: any similar government program in the health service field would inevitably deteriorate into the same sort of mess from which return to sanity would be about as likely as curing coronary thrombosis with laxative.

To illustrate the point, let's make a whimsical excursion into the not-now-but-maybe-someday Washington wonderland to see how medicine might fare under a government system patterned after the American agricultural program.

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The year is 1970 and total federal medical care under Social Security has been in effect since the 1968 labor-liberal election victory. Extensive programs of government-sponsored medical education, research, hospital service, and related endeavors have made it desirable to authorize a new cabinet-level executive office, the Department of Medical Care.

One of the first concerns of the new secretary was the shortage of physicians so larger training subsidies were shelled out. But with the medical schools graduating over 25,000 new physicians annually, there soon wasn't enough injury and illness to go around. The professional income market began to drop. Sensing an economic catastrophe, the Congress hastily enacted a fee-support program. Thus, the government cleverly circumscribed the law of supply and demand and a senator from New York promised to seek its repeal in the next session of Congress.

But the exercise of all this statesmanship didn't solve the problem. The surgeons twiddled their scalpels while the medical men read old journals about heart conditions they used to treat. Obviously, more government action was indicated.

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The stroke of bureaucratic brilliance was the "procedure bank," patterned after the old agricultural soil bank of a decade ago. Its beauty was in its simplicity: If a surgeon would promise to reduce the number of appendectomies he did, the Department of Medical Care would pay him for the procedures and store them among the medical care surplus. There were some problems, though, because soon a considerable accumulation of surplus procedures—unperformed hernioplasties, undelivered babies, and untreated (as well as uncontracted) cases of pneumonia—was building up.

And this didn't ease the mounting burden of Social Security taxes because more money was needed with which to purchase care actually required at support prices. The surplus grew to alarming proportions and some felt that it would surely become a major issue in the 1972 election campaigns.

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Fantastic? Yes, but not totally impossible. Absurd? Of course, but who'd have thought of the present agricultural program in 1925? Unbelievable? Nearly, but have you read the King bill, H.R. 4222?

In the most serious context, it may be reasonably asserted that the federal government *has already demonstrated* that supply and demand, extremes, and sanity are political anachronisms unfitted to the liberal's day. Indifference by those who know better can only speed the coming of such tragic times.—R. B. K.

Hospital Accreditation Is Winning Patients

Who goes into what hospital for how long at what costs? This four pronged question is amply answered in data just released by the American Hospital Association, reporting full facts and figures from nearly 6,900 inpatient institutions in the United States for 1960. And the pre-eminence of hospitals approved by the Joint Commission on Accreditation of Hospitals is astonishing, suggesting the increasing importance of self-imposed quality care standards as influential quantities for both physicians and patients.

In 1960, the most recent year for which the hospital scoreboard has been toted up, more than 83 per cent of all patients were admitted to accredited hospitals, where, incidentally, more than 60 per cent of all inpatient births occurred. These institutions possess six out of 10 hospital beds and provide 80 per cent of all hospital employment.

In the category of accredited nonfederal general medical and surgical institutions, the statistics are even more impressive. Although these hospitals account for only 55 per cent of the total, eight out of 10 patients received care in such in-

stitutions. They stayed an average of 7.6 days each, a decrease over 1959's 7.8 days average. Of all hospitals listed in every category, each averaged out $16.46 per patient day total cost with a high average of more than $33 for voluntary general medical and surgical institutions down to a low average of $4.91 for nonfederal mental hospitals. Average institutional loss per private patient was about 5 per cent, the report stated.

Hospital costs continue to rise and the authorities forecast more and greater increases in the future. But the shorter patient stay, the ever-decreasing mortality pattern, the progressively greater care capability, and continuing addition of new and useful services demonstrate that the hospital industry is keeping pace with medical science.—R. B. K.

Is There an (Uncle) Santa Claus?

(Explanatory note: On September 21, 1897, Francis P. Church penned his immortal editorial in the New York Sun to Virginia O'Hanlon in response to her question, "Is there a Santa Claus?" Today, the question is often phrased with the same words but with a different meaning. There are those liberal political elements who would have the electorate believe that there is an Uncle Santa in Washington. At this Christmas season, no physician should lose sight of harsh reality which almost flaunts a foreign philosophy at the reverence and joy of the observance.—The Editors.)



We take pleasure in answering at once and thus prominently the communication below, expressing at the same time our great gratification that its faithful author is numbered among the friends of the JOURNAL MSMA:

> DEAR PRESIDENT LONG: I am 27 years old, a relatively young physician. Some of my friends say that there is no Santa Claus in Washington who is promising full federal medical care to everybody. My colleagues say, "If you see it in the JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION, it's so." Please tell me the truth, is there a Santa Claus?
>
> JOHN T. DOE, M.D.

John, your friends are wrong. They have been affected by the skepticism of a scientific age. They do not believe except they see. They think that nothing can be which is not comprehensible by their little minds. All minds, John, whether they be doctors' or patients' are small, so they tell us in Washington. In this great nation of ours, we and our patients are mere insects to those with federalizing notions for our future.

Yes, John, there is a Santa Claus. He exists as certainly as H.R. 4222 and the fanatical crusade of its supporters to enact compulsory health care for the aging under Social Security. Alas! how dreary would be the administration's plight if there were no Santa Claus. It would be as dreary as if there were no Dr. John's. There would be no effort to place new and additional burdens of taxation upon those least able to afford them to make possible this federal program. We should have no growing private, voluntary health insurance and prepayment plans assuring 130 million Americans significant financial assistance in meeting the costs of illness.

Not believe in Santa Claus! You might as well not believe in Wilbur Cohen! You might get your local medical society to hire men to watch in all your physicians' reception rooms to catch this Santa Claus, but even if they did not see him urging patients to abandon private care for Social Security programs of compulsion, what would that prove? The vote will be in the Congress, not in your clinics and hospitals.

No Santa Claus! Doggonnit, he lives and it looks as though he lives forever. If the present or similarly inclined liberal politicians stay in office, he'll live a thousand years from now, John, nay, ten times ten thousand years from now, still threatening the best system of medical care in the world.—L. W. L.

NEW MEMBERS

The following physicians have been elected to membership by their respective component medical societies in the Mississippi State Medical Association and the American Medical Association:

BAGBY, GARLICK HUGH JR., Greenville. Born Lake Village, Ark., Nov. 13, 1924; M.D. University of Arkansas School of Medicine, Little Rock, 1952; interned Brooke Army Hospital, San Antonio, Texas; two year anesthesiology residency, Georgetown University Hospital, Washington, D. C.; member of the American Medical Association, the American Society of Anesthesiologists, and the International Anesthesia Research Society; elected Oct. 11, 1961, by Delta Medical Society.

CLARK, RICHARD HARRY JR., Hattiesburg. Born Hattiesburg, Miss., Oct. 14, 1929; M.D. Tulane University School of Medicine, New Orleans, La., 1954; interned Charity Hospital, New Orleans, La.; four-year general surgery residency, Tulane Surgical Service, Charity Hospital, New Orleans, La.; member of the American Medical Association; certified by the American Board of Surgery, 1960; Captain, U. S. Air Force, two years; elected Sept. 14, 1961, by South Mississippi Medical Society.

DEWITT, HENRY WILSON JR., Laurel. Born Hattiesburg, Miss., July 27, 1931; M.D. University of Mississippi School of Medicine, Jackson, 1958; interned University Medical Center, Jackson; two year anesthesiology residency, University Medical Center, Jackson; member of the American Medical Association; elected Sept. 14, 1961, by South Mississippi Medical Society.

GILLESPIE, HILTON LAMAR, Hattiesburg. Born Smithville, Miss., July 28, 1930; M.D. Tulane University School of Medicine, New Orleans, La., 1955; interned University of Mississippi School of Medicine, Jackson; three-year ob-gyn residency, University Medical Center, Jackson; Captain, U. S. Army, two years; elected Sept. 14, 1961, by South Mississippi Medical Society.

HORN, PAUL CAUGHMAN, Greenville. Born Magee, Miss., Dec. 6, 1930; M.D. Jefferson Medical College, Philadelphia, Pa., 1956; interned Jackson Memorial Hospital, Miami, Fla.; two year pediatric residency, University of Mississippi School of Medicine, Jackson; elected Oct. 11, 1961, by Delta Medical Society.

MCLEOD, JOHN ANGUS III, Hattiesburg. Born Hattiesburg, Miss., Aug. 16, 1927; M.D. University of Mississippi School of Medicine, Jackson, 1958; interned University of Mississippi School of Medicine, Jackson; two-year anesthesiology residency, University Medical Center, Jackson; Corporal, U. S. Army, two years; elected Sept. 16, 1961, by South Mississippi Medical Society.

RINEHART, COLMORE UPTON JR., Laurel. Born East St. Louis, Ill., June 30, 1929; M.D., University of Mississippi School of Medicine, Jackson, 1960; interned Mississippi Baptist Hospital, Jackson; member of the American College of Physicians and Surgeons; Sergeant, U. S. Air Force, three years; elected Sept. 14, 1961, by South Mississippi Medical Society.

TRIGG, DANIEL, Greenwood. Born St. Louis, Mo., March 1, 1922; M.D. St. Louis University School of Medicine, Mo., 1947; interned St. John's Hospital, St. Louis, Mo.; residency, Ochsner Foundation Hospital, New Orleans, La.; member of the American College of Pathologists; Treasurer 1960-1961 of Alton Ochsner Medical Fellows Association; U. S. Navy, two years; elected Oct. 11, 1961, by Delta Medical Society.

TUTOR, EUEL GLADE JR., Greenville. Born Randolph, Miss., July 6, 1930; M.D. University of Tennessee College of Medicine, Memphis, 1957; interned Baptist Memorial Hospital, Memphis, Tenn.; one year residencies at LeBonheur Children's Hospital and John Gaston Hospital, Memphis, Tenn.; elected Oct. 11, 1961, by Central Medical Society.

DEATHS

CLARK, JAMES ANDREW SR., Ruleville. M.D. Memphis Hospital Medical College, Tenn., 1903; died Sept. 15, 1961, aged 85.

LEAKE, WILLIAM LESLIE SR., Dundee. M.D. Memphis Hospital Medical College, Tenn., 1903; member of the American Medical Association; emeritus member of MSMA and member of the Fifty Year Club; died Oct. 1, 1961, aged 81.

Book Reviews

The Human Adrenal Gland. By Louis J. Soffer, M.D., attending physician and head of endocrinology, the Mount Sinai Hospital, New York City; clinical professor of medicine, State University of New York College of Medicine in New York City; Ralph I. Dorfman, Ph.D., director of laboratories, Worcester Foundation for Experimental Biology, Shrewsbury, Mass., research professor of biochemistry, Boston University Graduate School and professor of chemistry (affiliate), Clark University, and J. Lester Gabrilove, M.D., associate attending physician, the Mount Sinai Hospital, New York City, clinical associate professor of medicine, State University of New York College of Medicine in New York City. 591 pages with 74 illustrations. Philadelphia: Lea & Febiger, 1961. $18.50.

This book describes the anatomy, embryology, biochemistry and physiology of the adrenal gland. The chemical structures and production of the adrenocortical steroids are comprehensively explored; the synthetic analogues are considered in detail. Malfunction of the medulla and cortex of the adrenal gland is discussed and treatment of these various abnormalities is also well described.

Consideration of the adrenal gland from these various approaches makes the material quite wide in scope. The theoretical as well as the practical aspects are included. However, the detail with which each phase is considered provides much excellent material readily available for reference.

Inasmuch as a considerable amount of basic work with the adrenal gland has been done by the authors, this book does not constitute merely a review of facts and theories established by others. In addition, the biography is quite large so that a well-rounded picture is obtained of current knowledge of the adrenals as published by others.

The book is well written and contains a great deal of information which should be helpful to the student, house staff and practicing physician. Much fundamental information of value to all physicians, not only to those whose interest is chiefly in the area of endocrinology, is contained within the text. The compactness and thoroughness of this book make it one that is highly recommended to anyone seeking to increase his knowledge of the human adrenal gland.

RAYMOND F. GRENFELL, M.D.

Foreign Journals

Confusion in the Elderly, Some Common Remediable Causes. K. L. G. Nobbs, G.M., M.B., M.D., C.P.E.: Lancet 888-889 (Oct. 22) 1960.

Confusional states in the elderly arise with comparatively minor upsets which would hardly produce malaise in younger people. Because of their small margin of reserve the effects are more severe; also, they often have other conditions, such as arteriosclerosis, anemia, diminished renal function, and borderline malnutrition and dehydration. It is important, therefore, not to conclude too hastily that such confusional states in elderly people are manifestations of some form of senile dementia—such a premature conclusion, if erroneous, can lead to much avoidable suffering for both the patient and his relatives. Once old people have to stay in bed, the rapid development of loaded bowels and bladders, incontinence, dehydration, bedsores, and terminal bronchopneumonia must be anticipated. Perhaps, therefore, the most important single factor in the care of the elderly sick is to try to keep them out of bed in a comfortable chair for at least a few hours every day.

Relief of constipation alone often restores a patient's mental equilibrium within a week or two. Another possible cause of mental confusion is anemia. Even a slight degree of anemia can, by itself, cause general mental confusion, often maniacal in character. An increase in the hypoxic state of the cerebral cortex, which is already arteriosclerotic, can produce serious adverse mental changes. Restoration of the hemoglobin level is not always simple, but—provided that the anemia has not been present too long—the mental state can thus be restored to normal. Examination of the blood may suggest an iron-deficiency anemia, but the exhibition of iron alone, by whatever route, may not improve the situation. Malabsorption and vitamin deficiency play a major part in

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MEETINGS

NATIONAL AND REGIONAL

American Medical Association, June 24-28, 1962, Chicago, Ill. F. J. L. Blasingame, Executive Vice President, 535 N. Dearborn St., Chicago 10, Ill.

American Academy of General Practice, April 6-13, 1962, Las Vegas, Nev. Mr. Mac F. Cahal, Executive Director, Volker Blvd., at Brookside, Kansas City 12, Mo.

Mid-South Postgraduate Medical Assembly, Feb. 13-16, 1962, Memphis, Tenn. Leslie H. Adams, Executive Director, 774 Adams Ave., Memphis 5, Tenn.

STATE AND LOCAL

Mississippi State Medical Association, May 8-10, 1962, Jackson. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson.

Amite-Wilkinson Counties Medical Society, First Tuesday March, June, September, December. S. E. Field, Centreville, Secretary.

Central Medical Society, First Tuesday Monthly, 6:30 p.m., Robert E. Lee Hotel, Jackson. George E. Gillespie, 514-A East Woodrow Wilson Drive, Jackson, Secretary.

Claiborne County Medical Society. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Second Wednesday March and November, 2:00 p.m., Clarksdale. Robert R. McGee, 150 Yazoo Ave., Clarksdale, Secretary.

Coast Counties Medical Society, First Wednesday March, June, September, and November. Charles N. Floyd, 1412-23rd Ave., Gulfport, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday January, April, July, and October, 1:00 p.m., Hernando Motel Cafe, Hernando. L. L. Minor, Route 9, Memphis 9, Tenn., Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. A. Wayne Sullivan, 1204-21st Ave., Meridian, Secretary.

Homochitto Valley Medical Society, Fourth Tuesday Monthly, 7:30 p.m., Natchez Country Club, Natchez. W. T. Colbert, Natchez General Hospital, Natchez, Secretary.

North Central District Medical Society, Second Wednesday March and September. W. A. Middleton, 214 Summit St., Winona, Secretary.

Northeast Mississippi Medical Society, Second Tuesday March, June, September, and December, Tupelo. Thomas W. Wesson, 421 Main St., Tupelo, Secretary.

North Mississippi Medical Society, First Thursday January, April, and October, Oxford. R. L. Wyatt, Holly Springs, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. Samuel O. Massey, Jr., 220 E. Canal St., Picayune, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. Thomas F. Puckett, 715 Arledge St., Hattiesburg, Secretary.

Tri-County Medical Society, Second Tuesday March, June, September, and December. A. V. Beacham, Magnolia, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Tom H. Mitchell, The Street Clinic, Vicksburg, Secretary.

'I Am Opposed to Socialized Medicine,' Barnett Tells 100 at MSMA's State Legislative Meeting

"I make no secret of my strong opposition to socialized medicine and all the other socialistic ideas that are hatched up in Washington by selfish politicians," Governor Ross R. Barnett told approximately 100 key medical leaders gathered in Jackson for the Nov. 16 State Legislative Conference.



Three of Governor Ross R. Barnett's colonels greet him as he arrives to address the State Legislative Conference. Shaking hands with the governor is Dr. Frank M. Davis of Corinth, member of the Council on Legislation, while Dr. Fred M. Sandifer, of Greenwood, also a member of the council, and Dr. Stanley A. Hill, past president of MSMA, look on.

The conference was planned to provide a forum for the exchange of ideas and information, for formal statement of association policy by competent spokesmen, and for organizing support of legislation previously approved by the association. Speakers included both leaders in MSMA and state government.

Barnett reaffirmed his previous stand on medical care of the aging stating that "our administration supports the Kerr-Mills program. We have provided an interim implementation of this program by transferring more than one half million dollars from state hospital commission funds and we intend to continue to improve these services, with your help.

"We, therefore, contend that the Social Security health care proposals are totally unnecessary. The Kerr-Mills Law—with the help of the medical profession—can and will do the job."

Through the Kerr-Mills program, Barnett said, voluntary health insurance and prepayment programs will be supplemented—not supplanted, and the care of those who need it will be kept on a local, self-determined basis.



Speakers for the Nov. 16 State Legislative Conference pause before mounting the podium. From left to right are Dr. William E. Lotterhos, Representative Russell L. Fox, Dr. Lawrence W. Long, Lieutenant Governor Paul B. Johnson, Jr., Dr. Howard Nelson, and Dr. H. H. McClanahan.

"The Congress, in passing the Kerr-Mills Law, wisely and logically expressed the belief that each state knows its own particular problems better

than the federal government. Each state should be permitted to pass its own laws and to live by them," he concluded.

Other state leaders addressing the conference were Lieutenant Governor Paul B. Johnson, Jr., and Russell L. Fox, chairman of the General Legislative Investigating Committee.

Governor Johnson spoke on "The Senate and Medical Legislation," and Chairman Fox discussed "The House and Medical Legislation."

Speaking for MSMA, President Lawrence W. Long told the medical leaders, "Good legislation doesn't just happen: It is a calculated result of worthy objectives, carefully prepared programs, and the exercise of statesmanship by the legislative and executive branches of government. Sound health and medical legislation is the basic foundation for a desirable medical service climate."

Dr. Long also reported briefly on the recently organized Committee on Legislative Liaison. He said that this group consists of at least one physician in every county in the state in which medical doctors are located, or 81 of the 82 counties. The committee will work with colleagues and members of the legislature on a local county-community basis and supply and obtain information useful in assisting the over-all program as approved by the association, he said.

Dr. H. H. McClanahan Jr., chairman of the Board of Trustees, recounted the association's campaign against H.R. 4222, the King Bill, including the testimony given in July by Dr. George Twente and him before the House Committee on Ways and Means.

The chairman of the Board also discussed the investigation of the pharmaceutical industry by the Senate Subcommittee on Antitrust and Monopoly of which Senator Estes Kefauver is chairman.

In conclusion, Dr. McClanahan reported briefly on the Keogh proposal, H.R. 10.

As chairman of MSMA's Council on Legislation, Dr. William E. Lotterhos summed up the association's role in state medical legislation since its founding in 1856.

Dr. Lotterhos also outlined these medical measures which the association will support during the 1962 regular session of the state legislature:

—Permanent implementation of the Kerr-Mills program, which was temporarily implemented in April 1961 by executive order. A sum of $512,000 was transferred from the State Hospital Commission appropriation to the Department of Public Welfare for use in providing up to 15 days inpatient care for eligible individuals. The proposal seeks medical orientation for the program and a quantitative increase to 21 days hospital care.

—Licensure of physiotherapists.

—A state pure food, drug, and cosmetic act proposed by the State Board of Health.

—Revision of state law to allow the State Board of Health to fix all salaries of individuals in its employ.

—Certain changes in the program mechanics of the State Medical Education Board. The association's position is that this activity has served its purpose and is no longer required since the advent of the four-year medical school. The present proposal merely fixes responsibility for discharge of contingent service obligations with the award of scholarships and for proper, lawful satisfaction of loan obligations on the part of awardees.

—A proposal to regulate sources of ionizing radiation in the interest of protecting both the public and those qualified to use such devices. In the immediate future, the state will assume control from the Atomic Energy Commission of all sources of ionizing radiation except weapons systems and nuclear reactors.

—A Good Samaritan Law providing relief from civil liability for any individual who renders first aid or assistance at the scene of an accident in good faith. The association will also seek a lowering of the statute of limitation for professional liability from six to three years.

The association will again oppose, Dr. Lotterhos said, any effort to provide licensure of irregular practitioners or cultists. The association's



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continuous fight against such licensure has kept Mississippi one of four states who do not license chiropractors.

MSMA will also oppose measures providing for labeling of human blood by race which it considers unscientific and an obstruction to sound laboratory practices, he said.

Dr. Lotterhos also reported that publication of a weekly legislative bulletin will be instituted soon after Jan. 1, 1962. It is tentatively scheduled to go to general officers, trustees, members of the Council on Legislation, members of the Committee on Legislative Liaison, and the presidents and secretaries of component medical societies, he said.

Dr. Howard A. Nelson, past president of MSMA and vice speaker of the House of Delegates, opened the State Legislative Conference with the invocation.

Central Society Names Dr. Sutherland President

Dr. C. G. Sutherland was inaugurated president and Dr. W. L. Jaquith named president-elect at the November meeting of the Central Medical Society. Dr. George E. Gillespie was re-elected secretary-treasurer.

Vice presidents named included Dr. R. P. Henderson, Hinds; Dr. Jack H. Scott, Leake; Dr. John B. Howell, Jr., Madison; Dr. Edmond L. Whitfield, Rankin; Dr. C. David Lee, Scott; Dr. Dwight S. Keady, Simpson; Dr. Walter M. Coursey, Smith, and Dr. Edward V. Ross, Yazoo.

Dr. John Caden was named to the censors committee. New members voted in were Dr. John Ladd Buckingham, associate, and Drs. Robert Quarles Marston and Charles Ray Pyle, active.

Featured speaker for the scientific session was Dr. Michael DeBakey of Houston, Texas, who discussed "An Occlusive Disease of the Major Arteries of the Aortic Arch Producing Cerebral Vascular Insufficiency."

Dr. Edley H. Jones Heads National Specialty Society

Dr. Edley H. Jones of Vicksburg was inaugurated as president of the American Society of Ophthalmologic and Otolaryngologic Allergy at the organization's annual meeting in October.

Dr. Jones was a charter member of the Mississippi Eye, Ear, Nose and Throat Association and served as its president in 1954. He has worked with the Louisiana-Mississippi Ophthalmological and Otolaryngological Society as secretary for a number of years and has held the position of vice president of the southern section of the American Laryngological, Rhinological, and Otological Society.

MSMA Representatives Attend SMJAB Conference

Three representatives from the JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION attended the 1961 State Medical Journal Conference held Oct. 30 in Chicago.

Sponsored biennially by the State Medical Journal Advertising Bureau, the conference provides an opportunity for medical journal staff members from 34 publications to discuss their problems and their progress.



MSMA President Dr. Lawrence W. Long talks with O. M. Forkert, Dr. Joseph Garland, and Dr. George F. Lull during the 1961 State Medical Journal Conference. Mr. Forkert, Chicago, is a noted publications consultant, Dr. Garland, Boston, is editor of the New England Journal of Medicine, and Dr. Lull, Chicago, is president-elect of the Illinois State Medical Society.

Attending from MSMA were Dr. Lawrence W. Long, president and chairman of the Committee on Publications, Rowland B. Kennedy, executive secretary and managing editor, and Mrs. Betty M. Sadler, editorial assistant.

Annual highlight of the conference is the rating of the state medical journals by O. M. Forkert of Forkert, Blome & Associates, Inc., a noted publications counselor and internationally famous typographer. The JOURNAL OF THE MISSISSIPPI

MEDICAL ASSOCIATION, the youngest publication of the 34 participating journals, placed eighth with a score of 84½ out of 100.

Other topics considered at the meeting included the medical writing in the state publications, the editor and his job, and the future financial prospects of the journals.

During the conference the Mississippi delegation met with Ovid H. Bell of Fulton, Mo., JOURNAL MSMA's printer.

Immediately following the SMJAB meet, Mrs. Sadler attended the Southern Industrial Editors Institute held Nov. 1-3 at the University of Georgia, Athens, Ga. Around 80 staff members of association and industrial publications throughout the five state area of Mississippi, Alabama, Georgia, South Carolina, and Florida attended.

During this meeting specific facets of publishing were discussed including layout and art, photography, and printing processes.

JOURNAL MSMA was highly praised by Sol Malkoff of the Typography Shop, Atlanta, who evaluated the publications represented. Said Mr. Malkoff, "There is very little I can say to improve your publication. Layout, typography, quality of printing are all excellent. It is obvious this publication is the work of professionals."

Clarksdale Society Meets For 119th Semi-annual Session

The Clarksdale and Six Counties Medical Society held its 119th semi-annual session on Nov. 8 at the Coahoma County Hospital. Dr. E. W. Ryan of Charleston, 1961 president, presided at all sessions.



Dr. Lawrence W. Long, left, president of MSMA awards a certificate of membership in the Fifty Year Club to Dr. E. LeRoy Wilkins of Clarksdale.

Dr. Lawrence W. Long, MSMA president, presented a Fifty Year Club pin and certificate to Dr. E. LeRoy Wilkins during the banquet. Dr. Long also reported to the business session on MSMA programs and legislation.

During annual elections Dr. T. K. Chandler of Tunica was named to succeed Dr. Ryan. Vice presidents named at the same time were Dr. William W. Nobles, Tunica; Dr. William N. Crowson, Coahoma; Dr. Leon H. Brevard, Quitman, and Dr. Thomas F. Clay, Tallahatchie.

Dr. Whitman B. Johnson Jr., of Clarksdale, was elected secretary and Dr. T. K. Chandler delegate to MSMA. Dr. Robert P. Sayle of Tunica was chosen alternate delegate.

During the scientific program, Dr. Frank Marascalco of Clarksdale discussed "Carcinoma In Situ of the Cervix" and Dr. Charles B. McCall of Memphis, Tenn., spoke on "Pulmonary Emphysema and Cor Pulmonale." Dr. Gerald Plitman of Memphis concluded the session with an address on "Auto-Immune Syndromes."

Drugs in Cosmetics Are Dangerous Says AMA

Use of drugs in cosmetics has been condemned by the American Medical Association's Committee on Cosmetics. The statement was made by Dr. Stephen Rothman, Chicago, committee chairman, who said that ". . . it is ill advised to add chemically and pharmacologically active drugs to cosmetic preparations and to sell them across the counter indiscriminately."

He warned that no drug has been shown so far to have no percutaneous absorption, although some have demonstrated this characteristic to a very minute extent.

"There is no drug which sooner or later would not cause any harm if given without any restriction of the dosage. If it can be given without limitation," he added, "it is not a drug."

The committee chairman's statement said that cosmetics applied several times daily or often on relatively large surfaces present problems of uncontrolled absorption and systemic effects. It was denied that any drug such as vitamins, hormones, or antibiotics, when incorporated into cosmetics, has any cosmetological effect in the sense that it improves the appearance of nondiseased skin. A most serious objection was raised against cosmetic use of antibiotics such as bacitracin, polymyxin B, neomycin sulfate, and tyrothricin.

Dr. Rothman emphasized that such antibiotics

are toxic if administered internally and indicated that apparently no studies have been reported on the absorption of these substances through the skin. He contended that their use in cosmetic preparations should be contingent upon demonstration that unrestricted daily use will not produce toxic effects. Other objections to antibiotic cosmetics were the disturbance of equilibrium of bacteria normally present on the skin and development of antibiotic resistance by such bacteria.

Commenting on facial preparations containing estrogens, Dr. Rothman said in certain regions of the skin, estrogens increase moisture content but whether such effects are achieved in facial skin, even with massive applications, is still undecided.

Ramsey Succeeds Miller As AMA Field Representative

William Ramsey has been named to take Joe D. Miller's position on the AMA Field Service staff and will service Mississippi along with four other states.

Mr. Miller, who worked with Mississippi for the past two years, resigned to become executive director of the American Medical Political Action Committee.



Mr. Ramsey

Prior to joining AMA, Mr. Ramsey was executive secretary of the King County Medical Society in Seattle, Washington.

Mr. Miller's appointment to AMPAC was announced by Dr. Gunnar Gundersen of La Crosse, Wisconsin, chairman of the committee. The recently created AMPAC, according to Dr. Gundersen, a past president of AMA, will provide the medical profession with an organization for more effective participation in political and government affairs. Headquarters for AMPAC will be 520 North Michigan Avenue, Chicago.

A graduate of the University of Kentucky, Mr. Miller had been a member of the staff of AMA since 1957.

National Hemophilia Foundation Expands Program

Sufferers from a number of infrequent blood diseases, who until now have had no organized help, will be included in the program of the National Hemophilia Foundation, according to a decision just made by the Foundation's Executive Committee.

The committee acted on the recommendation of the Foundation's Medical Advisory Council which is headed by Dr. Kenneth M. Brinkhous, professor of medicine at the University of North Carolina.

Included in the National Hemophilia Foundation's program from now on will be all persons afflicted with inherited deficiencies of the coagulation factors.

Dr. Martin C. Rosenthal, medical advisor to the National Hemophilia Foundation, explained that this includes patients with pseudo-hemophilia, para-hemophilia, and congenital fibrinogen deficiency. It does not include, Dr. Rosenthal noted, persons with acquired blood defects such as leukemia or thrombocytopenia.

Persons with the diseases now covered by the program of the National Hemophilia Foundation, or doctors treating such patients, can write to the Foundation, at 175 Fifth Avenue, New York 10, N. Y., for information on the services available to them.

Physicians' Support Asked For Self-Help Program

The United States Public Health Service, with the assistance and approval of the American Medical Association, has instituted a Medical Self-Help Training Program in the interest of national defense.

The program is designed to reach every family in the United States, offering a course of instruction for emergency self-care in the absence of physicians during catastrophes.

To organize this program in Mississippi, Governor Ross R. Barnett has appointed a six-member steering committee. Appointees are Dr. Lawrence W. Long, MSMA president; Dr. A. L. Gray, executive officer of the State Board of Health; Robert Crook, director, State Department of Civil Defense; J. M. Tubb, state superintendent of education; Mrs. H. D. Worthy, president, State Parent-Teacher Association, and Dorothy Till, president, Mississippi State Nurses Association.

At its first meeting on Oct. 24 the committee decided to immediately inform the members of their respective organizations on the Medical Self-Help Training Program and the part physicians, health officers, nurses, parents, and teachers will be expected to play.

In a headquarters bulletin, MSMA informed

secretaries of the component medical societies that physicians will be asked to serve as instructors in health subjects for those who will carry the program to each Mississippi family. The cooperation and assistance of every state physician was requested.

The Medical Self-Help Training program consists of two parts: a reference manual to serve as a resource document for emergency health care in the home and a formal training course consisting of 12 lessons to be taught in a 16 hour period. Content of the Family Guide parallels the subjects of the training course.

Both physicians and health officials recognize the danger that some may be encouraged to try self-treatment when there is no emergency. However, the urgent need for persons to be able to meet their own health requirements is judged to override any possibilities of abuse of knowledge.

As a precaution, the lectures will repeatedly warn families not to diagnose illnesses or conditions, but simply to treat symptoms. Considerable emphasis will be placed on the fact that the lessons learned are for emergency use only.

West Society Names Dr. Kellum President

Dr. Herman E. Kellum Jr., was elected president of the West Mississippi Medical Society at the October annual meeting. He succeeds Dr. Thurston H. Whitaker.

Other officers are Dr. M. V. Dardin, first vice president; Dr. Henry Goodman of Rolling Fork, second vice president, and Dr. Tom Mitchell, secretary-treasurer.

Dr. J. A. K. Birchett and Dr. W. C. Poole were named delegates to MSMA.

Dr. Harwell Wilson, head of the general division of surgery at the University of Tennessee College of Medicine, was the guest speaker. He discussed "The Acute Surgical Abdomen: Diagnosis and Surgical Treatment."

State Surgeons Name Dr. Jack King President

Mississippi surgeons named Dr. Jack V. King of Jackson president and William L. Thornton of Meridian president-elect at the Oct. 20 meeting of the Mississippi Chapter, American College of Surgeons.

Dr. E. C. Hamilton of Gulfport was renamed secretary-treasurer at the convention, which was held in Jackson.

Speakers for the afternoon scientific session included Dr. King, who spoke on "Ano Rectal Disease"; Dr. Warren Bell of Jackson, who discussed "Current Drugs in Chemotherapy," and



Officers of the Mississippi Chapter of the American College of Surgeons take a coffee break during the Oct. 21 meeting of the group. From left to right are Dr. Jack V. King, Dr. M. M. Snelling, and Dr. E. C. Hamilton.

Dr. Homer D. Kirgis of New Orleans who addressed the group on "Evaluation and Treatment of Low Back Pain."

Dr. A. V. Hays of Gulfport spoke on "Secretory Otitis Media in Children" and Dr. L. J. O'Neil of New Orleans discussed "Fifteen Years' Experience in Gastric Surgery for Ulcer."

Discussers were Dr. Jack Atkinson of Brookhaven and Dr. James D. Hardy of Jackson.

The chapter's annual banquet concluded the meeting.

Football Equipment Needs Improving, Says AMA Group

The 25 fatalities from playing organized football this fall indicate the need for continuing research to improve the protective equipment for players, say most members of the American Medical Association's Committee on the Medical Aspects of Sports.

While the relatively large number of football fatalities at this stage of the season is shocking to the public and continuing reason for concern to physicians and other persons, an important question is "to determine whether some or all of

them may have been preventable," said Dr. Allan J. Ryan, Meriden, Conn., chairman of the committee. Dr. Ryan, former Yale track man, also is vice president of the American College of Sports Medicine.

There is no real statistical difference between the occurrence of 10, 30 or even 40 fatalities in one season, Dr. Ryan said. There are so few deaths in comparison to youths playing football that statistics are meaningless.

"The number of exposures (times that players participated in a practice or a game) must be in the tens or even hundreds of millions," he said.

The AMA's committee members were polled for their opinions on the increase in deaths by the *AMA News,* semimonthly newspaper of the medical organization.

The 1961 fatalities included 18 high school players, five college players and two semi-pro players. In addition, at least one death—that of a 12-year-old Chicago boy—was attributed to injuries suffered in a sand-lot game. Dr. Ryan said that about three-quarters of the fatal injuries occurred to the neck and head.

Dr. Francis D. Murphey, Memphis, Tenn., said that the helmet research should cover improving protection against injuries of the neck as well as head injuries. Dr. Murphey also said that strict enforcement of the rule against use of face protectors by opponents as a lever might reduce the incidence of neck injuries. Dr. Murphey, a neurosurgeon with a special interest in head injuries, was a speaker at MSMA's 93rd Annual Session.

Dr. T. B. Quigley, Boston, noted that the committee has been deeply involved with equipment, including helmets, and hopes to establish criteria and standards for maximum protection. Dr. Quigley is orthopedic consultant to the Harvard University football team.

Dr. Augustus Thorndike, Cambridge, Mass., mentioned the dangers in unsupervised sand-lot football, played with very few, if any, rules. A number of colleges and universities have intramural touch football programs played with strict interpretation of the rules and good supervision, he said, and this idea might be beneficial at younger age levels.

Dr. Thorndike also asked: "Do high schools use protective equipment which is new each year, or old in age and usage?" Dr. Thorndike is the football team physician at Harvard and author of the well-known book, "Athletic Injuries—Prevention, Diagnosis, and Treatment."



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"Tell me more about this weird dream, Mr. Scrooge."

Kennedy Foundation Institutes Mental Retardation Awards

The institution of a program of Annual International Awards totaling up to a quarter of a million dollars for achievement in the field of mental retardation has been announced by Edward M. Kennedy, president of the Joseph P. Kennedy Jr. Memorial Foundation at the Kennedy Memorial Hospital in Brighton, Mass.

Recipients of the awards will receive from five to twenty-five thousand dollars each for individual achievement and up to fifty thousand dollars each as support for furtherance of his or her projected or continuing program. First awards will be bestowed in early 1963 for work done during the calendar year of 1962; annual awards will be continued as long as the accomplishments of the program justify.

Said Mr. Kennedy in making the announcement: "The Kennedy Foundation is establishing the Kennedy International Achievement Awards in Mental Retardation to recognize scientists, scholars, and others whose work has led to major advances in the understanding of mental retardation."

Nominations for the honor of obtaining a Kennedy International Achievement Award will be sought from institutions, organizations, and individuals working in the field of mental retardation. Selection of those to achieve awards will be made by a committee of distinguished lay and professional persons concerned with mental retardation.

In addition to scientists and scholars, consideration for awards will also be given to individuals in three other groups: administrators, public officials, and others who have developed outstanding programs resulting in identification, diagnosis, care, rehabilitation, education or employment of the mentally retarded; educators and others who have developed distinguished programs for the training of research, service, or instructional personnel for the field of mental retardation; civic leaders, writers and others whose work has awakened the public conscience or led to increased in-

dividual or community effort in the interest of the mentally retarded.

"We hope the new Kennedy Foundation program of awards in mental retardation will go far to encourage work on the problem by individuals in many diverse groups," said Mr. Kennedy. "We hope also that the international nature of the awards may encourage other countries to work with us on this problem in a manner which might contribute towards more complete and more constructive international cooperation in many ways."

Mid-South Assembly Schedules 1962 Meet

The 73rd Annual Meeting of the Mid-South Postgraduate Medical Assembly will be held Feb. 13-16 according to Leslie H. Adams, executive director.

The meeting headquarters will be the Peabody Hotel in Memphis, Tenn. Dr. Lon E. Reed of Hot Springs, Ark. is president of the Assembly. A Mississippi physician, Dr. Everett H. Crawford of Tylertown, is a vice president.

Further information may be secured from Mr. Adams, at 774 Adams Avenue, Memphis 5, Tenn.

Ob-Gyn Board Announces Part I Examinations

The American Board of Obstetrics and Gynecology has announced that the Part I examinations (written) will be held in various cities of the United States, Canada, and military centers outside the continental United States on Jan. 5, 1962.

The application deadline for 1963 examinations is July 1, 1962, according to Dr. Robert L. Faulkner, executive secretary of the board.

Current bulletins may be obtained from Dr. Faulkner at 2105 Adelbert Road, Cleveland 6, Ohio.

Physicians Urged to Make AMEF Contributions

In recent letters to state physicians, both the dean of the University of Mississippi School of Medicine and the president of the Mississippi State Medical Association have urged support for the 1961 American Medical Education Foundation drive.

Wrote Dean Robert Q. Marston, "Last year the University received $8,654.47 through AMEF. . . . These gifts render a service to our educational program beyond their mere dollar value because they represent 'free' money, which can be used to meet emergencies and to satisfy needs for which other funds are not available."

Last year's funds, which had increased 26.6 per cent over 1959-60, were used for student scholarships and to attract and maintain an outstanding faculty, said the dean.

This is the second year that the University has joined with AMEF, MSMA, and the Medical Alumni of the University in an appeal for gifts to medical education in Mississippi. By earmarking their donations for the University of Mississippi, state doctors can contribute to AMEF and UMC at the same time.

In a later communication, Dr. Lawrence W. Long, MSMA president, told physicians that "tuition fees pay only 18 per cent of the cost of medical education; a medical school requires as much as 40 per cent of a university budget while graduating less than a tenth of the students. Our schools face an operating deficit of more than $10 million this year."

"We owe much to our medical schools," said Dr. Long. "Nothing could possibly emphasize this interest more than to have every member of MSMA contribute—however modest the sum."

From Feb. 1 to Sept. 30, 1961, 62 Mississippi physicians contributed $979.49 to AMEF. Auxiliary contributions brought this total to $1,481.39.

State Morbidity Reported Through November 3

The Mississippi State Board of Health reports the following occurrence of morbidity for 1961 through the 44th week of the year, ending Nov. 3. Case totals reported are shown opposite the disease condition.

Tuberculosis, pul.	575
Tuberculosis, O.F.	40
Salmonella food poisoning	4
Food poisoning, NOS	1
Gas gangrene	2
Paratyphoid fever	1
Salmonella infections	14
Brucellosis	7
Dysentery	
Amebic	44
Bacillary	44
Septicemia, NOS	1
Staphylococcus infection	18

Leptospirosis	2
Diphtheria	7
Typhoid fever	2
Meningococcus infection	
Meningitis	12
Meningococcemia	4
Meningitis, O.F.	103
Tularemia	9
Tetanus	13
Poliomyelitis (P)	22
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Saunders Announces Three Publications

W. B. Saunders Company features the following recent books in their full page advertisement appearing elsewhere in this issue:

GRAHAM, SOTTO AND PALOUCEK—CANCER OF THE CERVIX

Full and authoritative coverage of the diagnosis and management of cervical cancer—from Roswell Park Memorial Institute

HOGAN AND ZIMMERMAN—OPHTHALMIC PATHOLOGY

An atlas and textbook on diagnosis of diseases of the eye and on the pathology of involved tissue

OWEN—HOSPITAL ADMINISTRATION

Covers every aspect in the construction, organization and administration of today's hospitals

Thoracic Society Requests Research Applications

Applications for research grants in the field of respiratory diseases, including tuberculosis, for the year beginning July 1, 1962, are now being received by the American Thoracic Society, medical section of the National Tuberculosis Association.

Applications must be received not later than Dec. 15, 1961. For further information and application forms, write the Division of Research and Statistics, American Thoracic Society, 1790 Broadway, New York 19, N. Y.

Southern Medical Holds 1961 Annual Meeting

Southern Medical Association, the 15,000-member regional medical assembly, will hold its 56th annual meeting in Miami Beach, Florida, November 12-15, 1962. Headquarters will be the Hotel Fontainebleau.

Officers elected at the 55th annual meeting in Dallas, Texas, Nov. 6-9, 1961, were: Dr. A. Clayton McCarty, Louisville, Ky., president; Dr. Fount Richardson, Fayetteville, Ark., president-elect; Dr. Robert D. Moreton, Fort Worth, Texas, first vice president; Dr. Charles Max Cole, Dallas, Texas, second vice-president; Robert F. Butts, Birmingham, Ala., executive director; C. P. Loranz, Birmingham, Ala., advisor and special consultant; and Dr. R. H. Kampmeier, Nashville, Tenn., editor of the *Southern Medical Journal.*

Council chairman is Dr. J. Garber Galbraith, Birmingham, Ala., and vice-chairman is Dr. Guy T. Vise, Meridian, Miss. Seventeen councilors represent 16 Southern states and the District of Columbia.

Members and guests from 39 states and five foreign countries attended the Dallas meeting, with total registration of some 4,500. Fifty-one Mississippians were in attendance. There were 102 scientific and 147 technical exhibits, illustrating latest advances in medicine, surgery, med-

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ical specialties, pharmaceuticals and therapeutic devices.

Presented with the Seale Harris Award for important research accomplishment in the broad field of metabolism, endocrinology, nutrition or for research which contributed to a better understanding of the chemical changes occurring in disease was Dr. Henry H. Turner, Oklahoma City, Okla. The Distinguished Service Award of the Southern Medical Association went to Dr. George E. Burch, New Orleans, La., and the research Medal for meritorious and original research work in contributing to medical science to Dr. May Owen, Fort Worth, Texas. A special award for dedicated service was given to C. P. Loranz, Birmingham, Ala., SMA advisor and special consultant.

Outstanding features of the 55th annual meeting were four special symposia, a public telecast, and a series of scientific color television presentations.

Leading off the first day's sessions was a symposium on Immunologic Disorders and Transplantations. One of the principal speakers was Dr. Joseph E. Murray, Boston, Mass., associate professor of surgery, Harvard University School of Medicine.

A symposium on medicoeconomics, the business side of medicine, arranged under the co-sponsorship of the Wm. S. Merrell Company, had as guest speaker Dr. Morris Fishbein, editor, medical writer and lecturer. Wednesday's program also included a symposium on Cosmetic Problems in General Practice, presented in collaboration with the Committee on Cosmetics, American Medical Association. Dr. Stephen Rothman, Chicago, of the Argonne Cancer Research Hospital, was chairman.

"When Disaster Strikes!," outlining steps for civilian survival and military effectiveness in case of nuclear attack, was given on Thursday, and principal speaker was Dr. Edward Teller, world-renowned nuclear scientist, and father of the H-bomb.

The four symposia were in addition to the regular scientific section programs, of which there are 21. Latest addition to the scientific sections is that on Plastic and Reconstructive Surgery, added during 1961.

A public telecast, Medical Care for Adolescents, had its premiere during the four-day sessions, in cooperation with Merck Sharp & Dohme. A full schedule of scientific color television programs was screened through the courtesy of Smith Kline & French Laboratories.

PERSONALS

F. C. Boren recently received a certificate for 50 years of service from the Mantachie Lions Club. Dr. Boren also received the University of Tennessee Golden Key award.

Sam L. Brister was elected chief of staff of the Greenwood Leflore Hospital at the annual meeting. Jones W. Lamb was named vice chief, and and S. Gwin Mounger secretary-treasurer.

G. B. Flagg, Gulfport ophthalmologist, was named commodore of the Gulfport Yacht Club at the annual membership meeting. Charles N. Floyd was named fleet surgeon.

James C. Green and Mrs. Green of Tupelo entertained with dinner at their plantation home during the northern Circuit Courses sponsored by the University of Mississippi School of Medicine. All of Dr. Green's classmates from that section of the state and the guest speakers attended.

J. Harvey Johnston, Jr. was recently named a director of the Jackson Chamber of Commerce.

Thomas H. Simmons has been named chief of staff of Leland City Hospital. Others elected were Carl G. Nichols, deputy chief of staff, and John H. Graves, secretary.

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causing these anemias, and the whole gamut of therapy may be required. Dehydration, which occurs readily in old people, can also be the sole cause of mental confusion. Bronchopneumonia may cause delirium in patients of all ages, but it is particularly significant in the elderly because of the insidious way in which it can arise. There may be no fever or dyspnea to attract attention to the lungs, the confusional state presenting the only sign that bronchopneumonia is present. Sometimes the patient's apathy, listlessness, and a tendency to sink down in bed may provide the only clues to its presence. Examination of the lungs—particularly the bases posteriorly—will then reveal typical fine crepitations. The response to antibiotics—especially with respect to the confusional state—is often dramatic. The above are some of the more common possible causes of confusional states in the elderly; however, any serious disorder can present itself as temporary mental confusion. In over half the cases studied in one report, the causes of the mental confusion were extracerebral.

Floy Jack Moore, M.D.

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The letters used to explain in which department the matter indexed appears are as follows: "E," Editorial; "N," News; "BR," Book Review; "JR," Journal Review; the asterisk (*) indicates an original article in the JOURNAL, and the author's name follows the entry in brackets.

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